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CHARACTERISTICS OF VARIOUS MDAC SPACE  
SHUTTLE ASCENT CONFIGURATIONS WITH PARALLEL  
BURN PRESSURE-FED AND SRM T.M. Jarrett  
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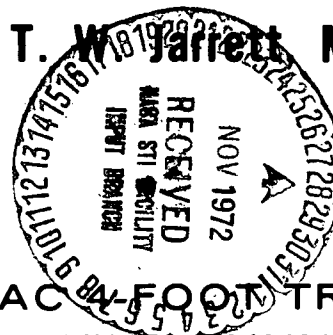
# AERODYNAMIC CHARACTERISTICS OF VARIOUS MDAC SPACE SHUTTLE ASCENT CONFIGUR- ATIONS WITH PARALLEL BURN PRESSURE-FED AND SRM BOOSTERS

# VOLUME IV

## ASCENT CONFIGURATION PLUME STUDIES AND MODEL BUILDUP

by

**T. W. Jarrett MDAC**



MDAC 84-FOOT TRANSONIC  
WIND TUNNEL

SADSAC SPACE SHUTTLE  
AEROTHERMODYNAMIC  
DATA MANAGEMENT SYSTEM

CONTRACT NAS8-4016  
MARSHALL SPACE FLIGHT CENTER

**SPACE DIVISION**  **CHRYSLER CORPORATION**

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OCTOBER, 1972

SADSAC/SPACE SHUTTLE

WIND TUNNEL TEST DATA REPORT

CONFIGURATION: MDAC Pressure Fed and SRM Parallel Burn Ascent Configurations

TEST PURPOSE: To Define the Aerodynamic Characteristics of an Ascent  
Configuration, the Individual Component Contribution,  
Relative Orbiter and Booster Position and Interference Effects

TEST FACILITY: MDAC Aerophysics Lab. 4 Foot Trisonic Wind Tunnel

TESTING AGENCY: MDAC (W)

TEST NO. & DATE: S-222; 2 Dec. 1971 - 18 Jan. 1972, 25 Jan. 1972 - 8 Feb. 1972

FACILITY COORDINATOR: T. W. Jarrett, MDAC

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CONTRACT NAS 8-4016

AMENDMENT 174

DRL 297 - 84a

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AERODYNAMIC CHARACTERISTICS OF VARIOUS MDAC SPACE SHUTTLE  
ASCENT CONFIGURATIONS WITH PARALLEL BURN PRESSURE-FED  
AND SRM BOOSTERS ( $M = 0.4 - 4.5$ )

By

T. W. Jarrett

INTRODUCTION

Various space shuttle ascent configurations were tested in the MDAC Aerophysics 4 x 4 Ft. Trisonic Wind Tunnel. The models were 0.6 percent scale. The ascent configurations consisted of a NASA/MSO 040A orbiter in combination with various HO centerline tank and booster geometries. The purposes of the tests were to determine the aerodynamics of the ascent configurations, the aerodynamic interference between components and its effect on orbiter aerodynamics, and to determine orbiter aileron effectiveness.

The model was sting mounted with either a single internal balance (in the orbiter HO tank) or dual internal balances (one in the orbiter and one in the orbiter HO tank). With the dual balance setup, three types of runs were made; one with tank alone on the tank balance, one with tank and two attached boosters on the tank balance, and one with the tank and one booster attached on the tank balance and the other booster isolated on a separate sting but in proximity to the tank and orbiter. In addition to the 6-component force and moment balance data, base pressure data were taken for the boosters, the tank and the orbiter. Angle of attack data included  $\alpha$  sweeps at  $0^\circ$  and  $6^\circ$   $\beta$  (the latter involving a knuckle change) and  $\beta$  sweeps at  $0^\circ$  and  $6^\circ$   $\alpha$ . Through the use of a remote roll device it was usually possible to get both an  $\alpha$  sweep and a  $\beta$  sweep in a single run.

## INTRODUCTION (Continued)

The report consists of five volumes arranged in the following manner:

- |            |   |
|------------|---|
| Volume I   | Ascent configurations with centerline<br>HO tanks $T_1$ and $T_2$ |
| Volume II  | Ascent configurations with centerline<br>HO tank $T_3$            |
| Volume III | Ascent configurations with centerline<br>HO tank $T_4$            |
| Volume IV  | Ascent configuration plume studies<br>and configuration buildup   |
| Volume V   | Orbiter alone, Tanks alone and<br>Boosters alone                  |

NOMENCLATURE  
General

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C <sub>p</sub>	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; $V/a$
p		pressure; N/m <sup>2</sup> , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$ , N/m <sup>2</sup> , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
$\alpha$	ALPHA	angle of attack, degrees
$\beta$	BETA	angle of sideslip, degrees
$\psi$	PSI	angle of yaw, degrees
$\phi$	PHI	angle of roll, degrees
$\rho$		mass density; kg/m <sup>3</sup> , slugs/ft <sup>3</sup>

Reference & C.G. Definitions

A <sub>b</sub>		base area; m <sup>2</sup> , ft <sup>2</sup>
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$\frac{l}{c}$ <sub>REF</sub>	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m <sup>2</sup> , ft <sup>2</sup>
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
$\infty$	free stream

# NOMENCLATURE (Continued)

## Body-Axis System

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
$C_N$	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
$C_A$	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
$C_Y$	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
$C_{A_b}$	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
$C_{A_f}$	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
$C_m$	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS_{REF}}$
$C_n$	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS_b}$
$C_l$	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS_b}$

## Stability-Axis System

$C_L$	CL	lift coefficient; $\frac{\text{lift}}{qS}$
$C_D$	CD	drag coefficient; $\frac{\text{drag}}{qS}$
$C_{D_b}$	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
$C_{D_f}$	CDF	forebody drag coefficient; $C_D - C_{D_b}$
$C_Y$	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
$C_m$	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS_{REF}}$
$C_n$	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS_b}$
$C_l$	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS_b}$
L/D	L/D	lift-to-drag ratio; $C_L/C_D$

# ADDITIONS TO NOMENCLATURE

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
$C_L^2$	CLSQR	lift coefficient squared.
$\delta_a$	AILRON	aileron, total aileron deflection angle, degrees, (left aileron-right aileron)/2.
$\delta_e$	ELEVON	elevon, surface deflection angle, positive deflection, trailing edge down; degrees.
$\delta_r$	RUDDER	rudder, surface deflection angle, positive deflection, trailing edge to the left; degrees
$\delta_{rf}$	RUDFLR	rudder flare, split rudder deflection angle, left split rudder trailing edge left and right split rudder trailing edge right, $\delta_{rf} = (\delta_{rL} + \delta_{rR})/2$ , positive deflection; degrees.

## CONFIGURATIONS INVESTIGATED

The wind tunnel models were 0.6 percent scale models and included one orbiter configuration, four tank configurations, and seven booster configurations. The orbiter centerline H<sub>2</sub>O propellant tanks included variations in diameter (302 and 325 in.), nose cone angle (10° and 15°), and axial position (120 inch travel). Of the boosters, three were solid rocket motors with the remainder being pressure fed boosters. The pressure fed boosters included variations in diameter (206 and 248 inch), nose cone angle (15° and 20°) and base flare (5° and 15°). The solid rocket motors included variations in diameter (156 and 120 in.) and base flare (0° and 15°) for the 156 in. motor.

In addition, simulated rocket plumes were tested at  $M = 1.5$  and  $2.2$  for both pressure fed and solid rocket motor boosters. These plumes were made up of three solid aluminum bodies each of which represented an envelope of individual engine plumes for the orbiter and each booster. These envelopes were generated by taking the outermost plume boundary of the outermost engine for each component and rotating this boundary about the null thrust vector of the component (orbiter or booster). The individual engine plumes were generated at MSC with the plume boundary defined by a method of characteristics solution with the flow field originating at the exit plane, and the effects of the external flow on the boundary calculated by Newtonian impact theory.

The contours of the various plumes tested are defined in Table 4 and Figure 43 through 46. The matrix of plume testing was as follows:

<u>CONFIGURATION</u>	<u>BOOSTER PLUME</u>	<u>ORBITER PLUME</u>	<u>M<sub>TEST</sub></u>
O <sub>1</sub> T <sub>1</sub> B <sub>1</sub>	LOX/PROP M = 2.5	4 ENG. J2S M = 2.5	2.2
O <sub>1</sub> T <sub>1</sub> B <sub>1</sub>	LOX/PROP M = 1.5	3 ENG. HiPc M = 1.5	1.5
O <sub>1</sub> T <sub>1</sub> B <sub>1</sub>	LOX/PROP M = 1.5	3 ENG. HiPc M = 1.5	2.2
O <sub>1</sub> T <sub>3</sub> B <sub>6</sub>	156" SRM M = 1.5	3 ENG. HiPc M = 1.5	1.5
O <sub>1</sub> T <sub>3</sub> B <sub>6</sub>	156" SRM M = 2.2	3 ENG. HiPc M = 2.2	2.2
O <sub>1</sub> T <sub>4</sub> B <sub>7</sub> A <sub>1</sub> -4	120" SRM M = 1.5	3 ENG. HiPc M = 1.5	1.5
O <sub>1</sub> T <sub>4</sub> B <sub>7</sub> A <sub>1</sub> -4	120" SRM M = 2.2	3 ENG. HiPc M = 2.2	2.2



Symbols for Orbiter Configuration:

<u>Symbol</u>	<u>Description</u>
O1	W1B1E1V2R2P1M1C0
W1	Wing
B1	Body
E1	Elevon
V1	Centerline vertical (Replaces V2R2)
V2	Centerline vertical
V <sub>OFF</sub>	No centerline vertical
C0	Canopy
R1	Rudder for V1
R2	Rudder for V2
P1	ACPS Engine Pod
M1	OMS Engine Pod
C1	Cupola
C2	Canopy Off (Replaces C0)

Symbols for Tanks

<u>Symbol</u>	<u>Description</u>
T ( )	Tank complete
T ( ) <sub>a</sub>	Tank complete at an alternate position with respect to the boosters and orbiter
F1	Fin for T <sub>4</sub>

Symbols for Boosters:

<u>Symbol</u>	<u>Description</u>
B ( )	Boosters complete
S	Skirt for booster
F <sub>4</sub>	Fins for B <sub>4</sub>
A	Thrust vectoring fuel tank for B <sub>7</sub>

Symbols for Plumes:

<u>Symbol</u>	<u>Description</u>
+ Plume (2.5)	3 Plumes (Orbiter + 2 Boosters) at M = 2.5
+ Plume (1.5)	3 Plumes (Orbiter + 2 Boosters) at M = 1.5
+ Plume (2.2)	3 Plumes (Orbiter + 2 Boosters) at M = 2.2

## TEST FACILITY

The MDAL 4' Trisonic Wind Tunnel facility is a blowdown type operation capable of Mach numbers of 0.2 to 5.0 and Reynolds numbers from approximately  $1 \times 10^6$  to  $2 \times 10^6$  per inch. The subsonic and transonic Mach numbers are run in a porous wall test section which is removed for supersonic testing. The supersonic test section utilizes a two dimensional flexible plate nozzle to obtain Mach numbers 1.5 to 5.0. The models are mounted on a sting that is supported from a vertical translating strut with a vertical plane rotating pod having a pitch range of  $-15^\circ$  to  $+25^\circ$  when no offset adapters are present.

## MODELS AND SUPPORT EQUIPMENT

The test models with all of their interchangeable component parts were 0.60 percent of full scale.

The orbiter model had a blended body contoured into a low delta wing. Effects of orbiter position and booster relative to the tank was investigated at two longitudinal locations on the tank (nominal and aft). The orbiter and boosters can be bolted to the tank (T1) in both nominal and aft positions as well as independently mounted from the tank. For the bolted orbiter case, the orbiter balance was inoperative and there were no force or moment data for the orbiter.

Effects of the orbiter control surfaces and control surface deflections were investigated for elevons, ailerons, and rudder with the surfaces deflected and undeflected.

Transition strips of No. 120 carborundum grit were used to insure boundary layer transition from laminar to turbulent flow. These strips were  $3/32$  inches wide and were located  $3/4$  inches aft of the orbiter nose,  $1/2$  inch aft of the booster nose,  $1/2$  inch aft of the tank nose, and at 5 percent local chord (both surfaces) on the wings, vertical tails and fins.

To achieve the required test angles of attack and sideslip two straight balance adapters were used in combination with the MDAL 6 degree sting adapter. A straight sting section positioned the model properly in the test section.

Pressure data for the orbiter, tank or the booster were obtained from base and balance cavity pressure pickups that were cantilevered off the sting. Leads for these pickups were routed externally over the model support system and into the tunnel strut. The boosters in the presence of the tank each had a base pressure pickup.

## DATA REDUCTION

The data are corrected for such factors as model tares, sting bending and balance deflections, interactions, and bilinearities.

### Composite Configurations

1. The orbiter data were reduced about the orbiter MRP using its reference dimensions and about the tank MRP, using orbiter reference dimensions ( $\bar{c}$  for longitudinal and  $b$  for lateral).
2. The tank data were reduced about the tank MRP using orbiter reference dimensions ( $\bar{c}$  for longitudinal and  $b$  for lateral).
3. A summation of the orbiter (tank MRP) and tank (tank MRP) data with all data corrected for angular attitudes to the tank body axes.

### Orbiter Alone Configurations

1. The orbiter data were reduced about the orbiter MRP using the orbiter reference dimensions ( $\bar{c}$  for longitudinal and  $b$  for lateral).

### Tank Alone Configurations

1. The tank data were reduced about the tank MRP using the orbiter reference dimensions.

### Booster Alone Configurations

1. The booster data were reduced about the booster MRP using the orbiter reference dimensions.

Ascent configuration composite tank MRP data, orbiter alone data, tank alone data and booster alone data are presented in this report, with the remaining data on file and available upon request.

Reference quantities used in these data reductions are as follows:

#### ORBITER

<u>Quantity</u>	<u>Full Scale Dimensions</u> <u>(Reference only)</u>	<u>Model Dimensions</u>
Reference Area (S)	3155.3 Ft <sup>2</sup>	16.37 In <sup>2</sup>
Reference Span (b)	882 In.	5.292 In
Reference MAC ( $\bar{c}$ )	609.5 In.	3.657 In
Moment Reference Points		See Figures 13 & 14

# DATA REDUCTION (CONTINUED)

## Areas:

Total Base ( $A_B$ )	298 $\text{Ft}^2$	1.546 $\text{In}^2$
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## TANK

<u>Quantity</u>	<u>Full Scale Dimensions</u> <u>(Reference only)</u>	<u>Model Dimensions</u>
Reference Area (S)	3155.3 $\text{Ft}^2$	16.37 $\text{in}^2$
Reference Length (b)	882 In.	5.292 in.
Reference Length ( $\bar{c}$ )	609.5 In.	3.657 in.
Moment Reference Points		See Figures 13 & 15

## Areas:

Total Base ( $A_B$ )/Tank	T1 - 422 $\text{Ft}^2$	2.125 $\text{In}^2$
	T2 - 422 $\text{Ft}^2$	2.125 $\text{In}^2$
	T3 - 518 $\text{Ft}^2$	2.613 $\text{In}^2$
	T4 - 537 $\text{Ft}^2$	2.785 $\text{In}^2$

## BOOSTER

<u>Quantity</u>	<u>Full Scale Dimensions</u> <u>(Reference only)</u>	<u>Model Dimensions</u>
Reference Area (S)	3155.3 $\text{ft}^2$	16.37 $\text{in}^2$
Reference Length (b)	882 in.	5.292 in.
Reference Length ( $\bar{c}$ )	609.5 in.	3.657 in.
Moment Reference Points		See Figures 13 & 16 through 19

# DATA REDUCTION (CONTINUED)

## Areas:

Total Base ( $A_B$ )/Booster	B1	-	901.0 $\text{Ft}^2$	4.539 $\text{In}^2$
	B1S1	-	2125 $\text{Ft}^2$	11.0093 $\text{In}^2$
	B1S2	-	4785 $\text{Ft}^2$	24.7887 $\text{In}^2$
	B2	-	137.8 $\text{Ft}^2$	0.694 $\text{In}^2$
	B2S	-	428 $\text{Ft}^2$	2.158 $\text{In}^2$
	B3	-	902 $\text{Ft}^2$	4.545 $\text{In}^2$
	B4	-	568 $\text{Ft}^2$	2.865 $\text{In}^2$
	B5	-	557 $\text{Ft}^2$	2.883 $\text{In}^2$
	B6	-	95.4 $\text{Ft}^2$	0.481 $\text{In}^2$
	B7	-	79.3 $\text{Ft}^2$	0.408 $\text{In}^2$

TABLE 1.

**TEST CONDITIONS**  
**TEST S-222**

MACH NUMBER	REYNOLDS NUMBER per (inch)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.4	$0.50 \times 10^6$	3.3	53
0.6	$0.83 \times 10^6$	7.6	47
0.7	$0.74 \times 10^6$	7.8	68
0.9	$0.79 \times 10^6$	10.0	50
0.95	$0.67 \times 10^6$	8.8	53
1.05	$0.69 \times 10^6$	9.5	50
1.1	$0.69 \times 10^6$	9.8	52
1.5	$0.63 \times 10^6$	10.0	55
2.2	$0.63 \times 10^6$	9.9	68
2.25	$0.94 \times 10^6$	14.0	52
2.5	$0.66 \times 10^6$	10.3	91
4.5	$1.15 \times 10^6$	10.6	120

BALANCE UTILIZED: See Listing on next page.

CAPACITY:

ACCURACY:

COEFFICIENT  
TOLERANCE:

NF \_\_\_\_\_  
 SF \_\_\_\_\_  
 AF \_\_\_\_\_  
 PM \_\_\_\_\_  
 YM \_\_\_\_\_  
 RM \_\_\_\_\_

\_\_\_\_\_  
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\_\_\_\_\_  
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 \_\_\_\_\_  
 \_\_\_\_\_

COMMENTS:

TABLE 1.

## TEST CONDITIONS (CONTINUED)

BALANCES UTILIZED

Several balances were required during the test. Listed below are the balances used, their capacity and the corresponding tunnel runs which apply to each.

<u>BALANCES</u>					
	<u>Orbiter</u> <u>3/4" D.</u>			<u>Tank Balance</u> <u>1" D.</u>	
Runs 1-10	#7 DAL			#13 NAR	
Runs 11-113	-			#13 NAR	
Runs 114-184	#5 DAL			-	
Runs 185-197	-			#13 NAR	
Runs 198-270	#58 DAL			#13 NAR	
Runs 271-420	#58 DAL			#11 DAL	
Runs 421-424	-			#11 DAL	
Runs 425-459	-			#11 DAL	
Runs 460-474	-			#11 DAL	
Runs 475-569	#58 DAL			#11 DAL	
Runs 570-646	-			#11 DAL	

Balance	MK. 31A 3/4" D. #7 DAL	MK. 2A 3/4" D. #5 DAL	MK. 10 3/4" D. #58 DAL	MK. 7 1" D. #13 NAR	MK. 3C 1" D. #11 DAL
<u>Gage</u>	<u>Capacity</u>				
NF (each) 2 gages	100 lb.	100 lb.	100 lb.	500 lb.	250 lb.
SF (each) 2 gages	100 lb.	50 lb.	100 lb.	300 lb.	250 lb.
AF	80 lb.	25 lb.	50 lb.	500 lb.	150 lb.
RM	20 in.lb.	60 in.lb.	40 in.lb.	150 in.lb.	150 in.lb.

# TABLE 2. TEST S-2222

## DATA SET COLLATION SHEET

(Φ1) ORBITER ISOLATED ON SEPARATE BALANCE.  
(BAX) BOOSTER ISOLATED WITHOUT RA BALANCE. ☐ PRETEST ☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION			NO. OF RUNS	MACH NUMBERS									
		A	B	SA	SE	SR		0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5
RD7101	(Φ1) T1 B1	A	0	0	0	0	3		396	395			394				
102		0	D	0	0	0	3		396	395			394	206	224		
103		A	6	0	0	0	2		373	371			370	254	253		266
104	↓	A	0	20	0	0	6		374	374			375		258		267
105	(Φ1) T1 B1L (B1R)	A	0	0	0	0	4						375				
106	↓	0	D	0	0	0	2		374				375				
107	↓	A	6	0	0	0	2							215		245	
108	(Φ1) T1 (B1L) B1R	A	6	0	0	0	2							221		244	
109	(Φ1) T1 B2	A	6	0	0	0	2							205	255		
110	(Φ1) T1 B2L (B2R)	A	0	0	0	0	4		387				388		259		268
111	↓	0	D	0	0	0	2		387				388				
112	↓	A	6	0	0	0	2								227		242
113	(Φ1) T1 (B2L) B2R	A	6	0	0	0	2								226		243
114	(Φ1) T1 B3	A	0	0	0	0	6		391	390			389	255	256		264
115		0	D	0	0	0	3		391	390			389				
116	↓	A	6	0	0	0	3							202	228		239
117	(Φ1) T1 B3L (B3R)	A	0	0	0	0	4		392				393		257		265
118	↓	0	D	0	0	0	2		392				393				
119	↓	A	6	0	0	0	2								230		241
120	(Φ1) T1 (B3L) B3R	A	6	0	0	0	2								229		240

COEFFICIENTS:

a or B SCHEDULES

A = -10° → 10°  
B = 10° → -10°  
C = -10° → 20°  
D = 60° → -60°

IDPVAR(1) IDPVAR(2) NDV

MACH ALPHA

7576

BX - BOTH LEFT & RIGHT BOOSTERS

BXL - LEFT BOOSTER

BXR - RIGHT BOOSTER



TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION				NO. OF RUNS	MACH NUMBERS											
		A	B	SA	SE	SR			0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5		
R07121	( $\phi$ ) T1 B4	A	0	0	0	0		6		378	377			376	269	273		276		
122		A	0	0	0	0		1						272						
123		0	D	0	0	0		3		378	377			376						
124		A	0	0	0	0		3						261	231			238		
125	( $\phi$ ) T1 B4L (B4R)	A	0	0	0	0		4		380				379		274		275		
126		A	0	0	0	0		2								233		236		
127		0	D	0	0	0		2		380				379						
128	( $\phi$ ) T1 (B4L) B4R	A	0	0	0	0		2							232		237			
129	( $\phi$ ) T1 B5	A	0	0	0	0		2						249			248			
130		A	0	0	0	0		1						208						
131	( $\phi$ ) T1 B5L (B5R)	A	0	0	0	0		1									246			
132	( $\phi$ ) T1 (B5L) B5R	A	0	0	0	0		1									247			
133	( $\phi$ ) V1 T1 B5	A	0	0	0	0		6		384	382			383	250	252		251		
134		0	D	0	0	0		3		384	382			383						
135		A	0	0	0	0		1							218					
136		0	A	0	0	0		1							220					
137	( $\phi$ ) V1 T1 B5L (B5R)	A	0	0	0	0		4		386				385		261		262		
138		0	D	0	0	0		2		386				385						
139		A	0	0	0	0		1							216					
140	( $\phi$ ) V1 T1 (B5L) B5R	A	0	0	0	0		1							217					

COEFFICIENTS: IDPVAR(1) IDPVAR(2) INDV

3 OF 3  
 SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION				NO. of RUNS	MACH NUMBERS									
		A	B	SA	SE	SR			0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5
RD7141	( $\phi$ 1 V1) T1	A	0	0	0	0		3		399	398			397				
142		0	D	0	0	0		3		399	398			397				
143		A	0	20	0	0		3		401	402			400				
144		0	D	20	0	0		3		401	402			400				
145		A	0	0	0	10		3		405	404			403				
146		0	D	0	0	10		3		405	404			403				
147	( $\phi$ 1) T1	A	0	0	0	0	"	8	360	361	362	363	364	365		260	263	
148		0	D	0	0	0		6	360	361	362	363	364	365				
149		A	6	0	0	0		2								234	235	
150	( $\phi$ 1) T2 B1	A	0	0	0	0		3		415	416			417				
151		0	D	0	0	0		3		415	416			417				
152		A	6	0	0	0		2							207	223		
153	( $\phi$ 1) T2 B1L (B1R)	A	6	0	0	0		1								214		
154	( $\phi$ 1) T2 B2	A	6	0	0	0		1							204			
155	( $\phi$ 1) T2 B3	A	6	0	0	0		1							203			
156	( $\phi$ 1) T2 B4	A	0	0	0	0		3		420	419			418				
157		0	D	0	0	0		3		420	419			418				
158		A	6	0	0	0		1							200			
159	( $\phi$ 1) T2 (B1L) B1R	A	6	0	0	0		1							222			
160	( $\phi$ 1 V1) T2 B5	A	0	0	0	0		3		408	407			406				

COEFFICIENTS:  $\geq$  IDPVAR(1) IDPVAR(2) NDV

a or b  
SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION			NO. of RUNS	MACH NUMBERS											
		A	B	5A	5E	5R		0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5		
RP7161	( $\phi$ 1V1) T2 B5	0	D	0	0	0	3		408	407			406						
162	( $\phi$ 1V1) T2A B5	A	0	0	0	0	3		409	410			411						
163	↓	0	D	0	0	0	3		409	410			411						
164	( $\phi$ 1) T2A B1	0	A	0	0	0	1								211				
165	↓	A	D	0	0	0	3		414	413			412						
166	↓	0	D	0	0	0	3		414	413			412						
167	↓	A	0	0	0	0	2							209	210				
168	( $\phi$ 1) T2A B1L (B1R)	A	0	0	0	0	1								213				
169	( $\phi$ 1) T2A (B1L) B1R	A	0	0	0	0	1								212				
170	( $\phi$ 1) T2	A	0	0	0	0	2			367			366						
171	↓	0	D	0	0	0	2			367			366						
172	( $\phi$ 1) T2A	A	0	0	0	0	2			368			369						
173	↓	0	D	0	0	0	2			368			369						
174	( $\phi$ 1) T3 B1	A	0	0	0	0	6		333	329			331	277	278		279		
175	↓	0	A	0	0	0	3		334	330			332						
176	↓	A	0	0	0	0	3						309	308			310		
177	( $\phi$ 1) T3 B1L (B1R)	A	0	0	0	0	4			335			336		281		280		
178	↓	0	D	0	0	0	2			335			336						
179	↓	A	0	0	0	0	2								312		311		
180	( $\phi$ 1) T3 (B1L) B1R	A	0	0	0	0	4		328				327		313		314		

COEFFICIENTS: IDPVAR(1) IDPVAR(2) IDV

a or b  
SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION				NO. OF RUNS	MACH NUMBERS									
		A	B	SA	SE	SR			0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5
R72181	( $\phi$ 1) T3 (B1L) B1R	A	6	0	0	0	0	1								326		
182	( $\phi$ 1) T3 B2	A	0	0	0	0	0	5		350	351					296		297
183	$\downarrow$	0	D	0	0	0	0	3		350	351							
184	( $\phi$ 1) T3 B2L (B2R)	A	0	0	0	0	0	4			354			353		294		298
185	$\downarrow$	0	D	0	0	0	0	2			354			353				
186	$\downarrow$	A	6	0	0	0	0	2								300		301
187	( $\phi$ 1) T3 (B2L) B2R	A	6	0	0	0	0	2								303		302
188	( $\phi$ 1) T3 B3	A	0	0	0	0	0	6		356	355					286		288
189	$\downarrow$	0	D	0	0	0	0	3		356	355							
190	$\downarrow$	A	6	0	0	0	0	2							317	318		
191	( $\phi$ 1) T3 B3L (B3R)	A	0	0	0	0	0	4		359						285		284
192	$\downarrow$	0	D	0	0	0	0	2		359								
193	$\downarrow$	A	6	0	0	0	0	1								319		
194	( $\phi$ 1) T3 (B3L) B3R	A	6	0	0	0	0	1								320		
195	( $\phi$ 1) T3 B4	A	0	0	0	0	0	1							1			
196	$\downarrow$	0	A	0	0	0	0	1							2			
197	$\downarrow$	A	0	20	0	0	0	1							3			
198	$\downarrow$	A	0	0	0	0	10	2							4	8		
199	( $\phi$ 1) T3 B4L (B4R)	A	0	0	0	0	0	4		338						282		283
1A1	$\downarrow$	0	D	0	0	0	0	2		338								

COEFFICIENTS:  $\alpha$  or  $\beta$  IDEVAR(1) IDEVAR(2) NDV

SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION				NO. of RUNS	MACH NUMBERS											
		A	B	SA	SE	SR			0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5		
RD71A2	( $\phi$ 1)T3 B4L (B4R)	A	G	0	0	0		2												
1A3	( $\phi$ 1)T3 (B4L) B4R	A	G	0	0	0		2												
1A4	( $\phi$ 1)T3 B4 F4	A	0	0	0	0		2							6	7				
1A5	( $\phi$ 1V1) T3 B5	A	0	0	0	0		6	341	334				340	242	241		243		
1A6	$\downarrow$	0	D	0	0	0		3	341	334				340						
1A7	$\downarrow$	A	G	0	0	0		2						322	321					
1A8	( $\phi$ 1V1) T3 B5L (B5R)	A	0	0	0	0		4		342				343		245		244		
1A9	$\downarrow$	0	D	0	0	0		2		342				343						
1B1	$\downarrow$	A	G	0	0	0		1								324				
1B2	( $\phi$ 1V1) T3 (B5L) B5R	A	G	0	0	0		1								325				
1B3	( $\phi$ 1) T3	A	0	0	0	0		8	344	348	347	346	345	344		240		244		
1B4	$\downarrow$	0	D	0	0	0		6	344	348	347	346	345	344						
1B5	$\downarrow$	A	G	0	0	0		2								316		315		
1B6	( $\phi$ 1V1) T1 B5	0	D	0	0	0		3							558	563		566		
1B7	( $\phi$ 1V1) T1	A	0	30	0	0		3							557	562		567		
1B8	$\downarrow$	0	D	20	0	0		3							557	562		567		
1B9	( $\phi$ 1V1) T2 B5	A	0	0	0	0		3							559	564		565		
1C1	( $\phi$ 1) T1 B6	A	0	0	0	0		2		496					556					
1C2	$\downarrow$	0	D	0	0	0		2		496					556					
1C3	$\downarrow$	A	0	20	0	0		6	495	494				493	555	554		569		

COEFFICIENTS:

IDPVAR(1) IDPVAR(2) INDV

a or b  
 SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION				NO. OF RUNS	NACH NUMBERS											
		A	B	SA	SE	SR			0.4	0.6	0.90	0.95	1.05	1.1	1.5	2.2	2.25	4.5		
RD71C4	(φ1) T1B6	0	D	20	0	0		6		495	494			493	555	554		569		
1C5								3							558	563		566		
1C6	(φ1V1) T1B5	A	C	0	0	0		6		477	476			475	544	542		539		
1C7	(φ1) T4 B7A1-4	A	0	0	0	0		6		477	476			475	544	542		539		
1C8		0	D	0	0	0		6		477	476			475	544	542		539		
1C9		A	C	0	0	0		6		506	507			504	517	520		527		
1D1		A	0	20	0	0		6		478	479			480	550	543		538		
1D2		0	D	20	0	0		6		478	479			480	550	543		538		
1D3		A	C	20	0	0		6		511	508			509	516	521		526		
1D4		A	0	0	0	10		6		483	482			481	551	544		537		
1D5		0	D	0	0	10		6		483	482			481	551	544		537		
1D6	✓	A	C	0	0	10		6		512	513			514	515	522		525		
1D7	(φ1) T4 B7-4	A	0	0	0	0		3		489	488			487						
1D8	✓	0	D	0	0	0		3		489	488			487						
1D9	(φ1) T4	A	0	0	0	0		6		490	491			492	548	547		536		
1E1		0	D	0	0	0		6		490	491			492	548	547		536		
1E2		E	0	0	0	0		1										534		
1E3	✓	E	6	0	0	0		1										531		
1E4	(φ1) T4 B7A1-5	A	0	0	0	0		6		484	485			486	552	545		540		
1E5	✓	0	D	0	0	0		6		484	485			486	552	545		540		

COEFFICIENTS:  $E = -10^8 \rightarrow 30^\circ$  IDPVAR(1) IDPVAR(2) INDV

a or b  
 SCHEDULES



TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

TANK & BOOSTERS @ TANK MRC

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHU.		CONTROL DEFLECTION				NO. of RUNS	MACH NUMBERS									
		$\alpha$	$\beta$															
RD7201	NOTE: SAME AS																	
202	DATA SETS																	
203	RD71XX																	
204																		
205																		
206																		
207																		
208																		
209																		
210																		
211																		
212																		
213																		
214																		
215																		
216																		
217																		
218																		
219																		
220																		

COEFFICIENTS: CN CY CA CAF CB CLM EYN MACH ALPHA BETA 7

$\alpha$  or  $\beta$   
SCHEDULES



TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

ORBITER @ TANK MRC

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCID.		CONTROL DEFLECTION				NO. of RUNS	MACH NUMBERS									
		$\alpha$	$\beta$															
RD7301	NOTE: SAME AS																	
302	DATA SETS																	
303	RD71XX																	
304																		
305																		
306																		
307																		
308																		
309																		
310																		
311																		
312																		
313																		
314																		
315																		
316																		
317																		
318																		
319																		
320																		

1	7	13	19	25	31	37	43	49	55	61	67	75/76
EN	ICX	CA	CAF	ICBL	CLM	CYN					MACH	ALPHA
											BETA	7

COEFFICIENTS: IDPVAR(1) IDPVAR(2) IDV

$\alpha$  or  $\beta$   
SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

COMPOSITE @ TANK MRG

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHID.		CONTROL DEFLECTION				NO. OF RUNS	MACH NUMBERS											
		$\alpha$	$\beta$																	
RD7401	NOTE: SAME AS																			
402	DATA SETS																			
403	RD71XX																			
404																				
405																				
406																				
407																				
408																				
409																				
410																				
411																				
412																				
413																				
414																				
415																				
416																				
417																				
418																				
419																				
420																				

COEFFICIENTS:

 $\alpha$  or  $\beta$   
 SCHEDULES

IDPVAR(1) IDPVAR(2) INDV

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

COMPOSITE @ TANK MRC

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCID.		CONTROL DEFLECTION				NO. OF RUNS	MACH NUMBERS											
		A	B	FA	FE	FR			0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5		
RD7501	φ171B1	A	0	0	0	0		7		77	78			79	16	11	421	21		
502		A	6	0	0	0		6		95	94			93	25	26		33		
503		A	6	0	0	0		1								197				
504		0	8	0	0	0		4		77	78				16	11				
505		0	D	0	0	0		1									421			
506		0	A	0	0	0		1						80						
507	φ171B1+Rune(2.5)	A	0	0	0	0		2								185	422			
508		A	6	0	0	0		1								196				
509		A	0	20	0	0		2								186	423			
510		A	0	0	0	10		2								187	424			
511		0	D	0	0	0		1									422			
512		0	D	20	0	0		1									423			
513		0	D	0	0	10		1									424			
514	φ171B2	A	0	0	0	0		6		84	85			86	15	12		23		
515		A	6	0	0	0		6		87	88			89	24	27		32		
516	φ171B25	A	0	0	0	0		5		83	82			81	14	13				
517		A	6	0	0	0		6		92	91			90	28	29		31		
518	φ173B2	A	0	0	0	0		1							49					
519		A	6	0	0	0		3							48	39		38		
520	φ173B4	A	0	0	0	0		6		71	72			73	51	56		59		

1 7 13 19 25 31 37 43 49 55 61 67 7576

CN CY CA CAF CBL CLM EYM  
 MACH ALPHA BETA INDV  
 IDPVAR(1) IDPVAR(2) INDV

α or β  
SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION				NO. OF RUNS	MACH NUMBERS											
		$\alpha$	$\beta$	$\delta A$	$\delta E$	$\delta R$			0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5		
RD7521	$\phi 173 B4$	0	A	0	0	0		6		71	72			73	51	56		60		
522		A	C	0	0	0		6		99	100			101	46	42		35		
523		C	B	0	0	0		6		104	103			102	45	43		36		
524		A	0	20	0	0		6		69	67			68	53	57		61		
525	$\vee$	A	0	0	0	10		6		70	64			63	52	55		62		
526	$\phi 173 B4 F4$	A	0	0	0	0		6		76	75			74	50	57		58		
527	$\vee$	A	C	0	0	0		6		98	97			96	47	40		37		
528	$\phi 171 B1$	A	0	0	0	0		2							425	431				
529		0	D	0	0	0		2							425	431				
530		A	0	20	0	0		2							426	432				
531		0	D	20	0	0		2							426	432				
532		A	0	10	0	0		1							427					
533		0	D	10	0	0		1							427					
534		A	0	-10	0	0		1							428					
535		0	D	-10	0	0		1							428					
536		A	0	0	0	10		2							429	430				
537	$\vee$	0	D	0	0	10		2							429	430				
538	$\phi 171 B1 + PLUME(1.5)$	A	0	0	0	0		2							434	437				
539		0	D	0	0	0		2							434	437				
540	$\vee$	A	0	20	0	0		2							433	438				

COEFFICIENTS:

 $\alpha$  or  $\beta$ 

SCHEDULES

IDPVAR(1) IDPVAR(2) INDV

TABLE 2. TEST S-2222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION			NO. of RUNS	MACH NUMBERS									
		A	B	SA	SE	SR		0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5
RD7541	φ171B1+Pume (1.5)	0	D	20	0	0	2							433	438		
542		A	0	0	0	10	2							435	436		
543	↓	0	D	0	0	10	2							435	436		
544	T3B2	A	0	-	-	-	2							442	439		
545	↓	0	D	-	-	-	2							442	439		
546	T3B5	A	0	-	-	-	2							441	440		
547	↓	0	D	-	-	-	2							441	440		
548	φ173B6	A	0	0	0	0	2							443	448		
549		0	D	0	0	0	2							443	448		
550		A	0	20	0	0	2							444	447		
551		0	D	20	0	0	2							444	447		
552		A	0	0	0	10	2							445	449		
553		0	D	0	0	10	2							445	449		
554		A	0	0	0	10	1								446		
555	↓	0	D	0	0	10	1								446		
556	φ173B6+Pume (1.5)	A	0	0	0	0	1							455			
557		0	D	0	0	0	1							455			
558		A	0	20	0	0	1							454			
559		0	D	20	0	0	1							454			
560	↓	A	0	0	0	10	1							453			

COEFFICIENTS: 1 7 13 19 25 31 37 43 49 55 61 67 7576

a or b  
 SCHEDULES

IDPVAR(1) IDPVAR(2) INDV

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCUD.		CONTROL DEFLECTION			NO. of RUNS	MACH NUMBERS									
		$\alpha$	$\beta$	$\delta A$	$\delta E$	$\delta R$		0.4	0.6	0.90	0.95	1.05	1.1	1.5	2.2	2.25	4.5
RD7561	$\phi 173 B6 + P_{LUNE}(1.5)$	0	D	0	0	10	1							453			
562	$\phi 173 B6 + P_{LUNE}(2.2)$	A	0	0	0	0	1								450		
563		0	D	0	0	0	1								456		
564		A	0	20	0	0	1								451		
565		0	D	20	0	0	1								451		
566		A	0	0	0	10	1								452		
567		0	D	0	0	10	1								452		
568	7185	A	0	-	-	-	2							452	458		
569	$\downarrow$	0	D	-	-	-	2							457	458		
570	7186	A	0	-	-	-	6		471	470				469	456	459	605
571	$\downarrow$	0	D	-	-	-	6		471	470				469	456	459	605
572	$\phi 174 B7A1-4$	A	0	0	0	0	4			460				461	598	572	
573	$\downarrow$	0	D	0	0	0	4			460				461	598	572	
574	$\phi 174 B7A1-4 + P_{LUNE}(1.5)$	A	0	0	0	0	1							586			
575		0	D	0	0	0	1							586			
576		A	0	20	0	0	1							588			
577		0	D	20	0	0	1							588			
578		A	0	0	0	10	1							587			
579	$\downarrow$	0	D	0	0	10	1							587			
580	$\phi 174 B7A1-4 + P_{LUNE}(2.2)$	A	0	0	0	0	1							577			

COEFFICIENTS:

 $\alpha$  or  $\beta$ 

SCHEDULES

IDPVAR(1) | IDPVAR(2) | NDV

TABLE 2. TEST S-2222 DATA SET COLLATION SHEET (CONTINUED)

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION				NO. of RUNS	MACH NUMBERS											
		$\alpha$	$\beta$	SA	SE	SR	SRE		0.7	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5		
R07581	$\phi 174B7A1-4 + Rume(1.22)$	C	D	0	0	0	0	1												
582		A	0	20	0	0	0	1												
583		0	D	20	0	0	0	1												
584		A	C	0	0	10	0	1												
585		0	D	0	0	10	0	1												
586	$\phi 174F1B7A1-4$	A	0	0	0	0	0	2												
587	$\downarrow$	0	D	0	0	0	0	2												
588	$T4B7A1-4$	A	0	-	-	-	-	6		474	463									
589	$\downarrow$	0	D	-	-	-	-	6		474	463									
590	$T4F1B7A1-4$	A	0	-	-	-	-	4		645	644									
591	$\downarrow$	0	D	-	-	-	-	4		645	644									
592	$\phi 17174B7A1-4$	A	0	0	0	0	0	2												
593		0	D	0	0	0	0	2												
594		A	0	0	0	10	0	2												
595		0	D	0	0	10	0	2												
596		A	0	0	0	0	20	2												
597		0	D	0	0	0	20	2												
598		A	0	0	0	10	20	2												
599		0	D	0	0	10	20	2												
5A1	$\phi 17174B7A1-4 + Rume(1.22)$	0	D	0	0	0	0	1												

COEFFICIENTS:  $\alpha$  or  $\beta$  IDPVAR(1) IDPVAR(2) INDV

SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)☐ PRETEST☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHID.		CONTROL DEFLECTION					NO. of RUNS	MACH NUMBERS									
		a	b	SA	SE	SP	SRE			0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5
R075A2	Ø1V174B7A1-4+Pume(1.9)	0	D	0	0	0	0	0	1							582			
5A3		A	0	0	0	0	10	0	1							583			
5A4		0	D	0	0	0	10	0	1							583			
5A5		A	0	0	0	0	0	20	1							585			
5A6		0	D	0	0	0	0	20	1							585			
5A7		A	0	0	0	0	10	20	1							584			
5A8		0	D	0	0	0	10	20	1							584			
5B1	Ø1V174B7A1-4+Pume(2.2)	A	0	0	0	0	0	0	1							581			
5B2		0	D	0	0	0	0	0	1							581			
5B3		A	0	0	0	0	10	0	1							580			
5B4		0	D	0	0	0	10	0	1							580			
5B5		A	0	0	0	0	0	20	1							578			
5B6		0	D	0	0	0	0	20	1							578			
5B7		A	0	0	0	0	10	20	1							579			
5B8		0	D	0	0	0	10	20	1							579			

COEFFICIENTS:

a or b

SCHEDULES

IDPVAR(1) IDPVAR(2) INDV



TABLE 2. TEST

S-232.

DATA SET COLLATION SHEET (CONTINUED)

RD76XX TANK @ TANK MRC  
RD77XX ORBITER @ ORBITER MRC☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCUD.		CONTROL DEFLECTION				NO. OF RUNS	MACH NUMBERS										
		$\alpha$	$\beta$	$\delta A$	$\delta E$	$\delta R$			0.4	0.6	0.9	0.95	1.05	1.1	1.5	2.2	2.25	4.5	
RD7601	71	A	0	-	-	-		4			105			107		190		193	
602	72	A	0	-	-	-		4			109			108		191		192	
603	73	A	0	-	-	-		4			110			111		189		194	
604	74	A	0	-	-	-		6			466	467		468	601	574		603	
RD7701	$\phi 1$	C	0	0	0	0		6		126	127			128	181	180		182	
702	$\downarrow$	C	6	0	0	0		6		155	154			153	156	157		165	
703	$\downarrow$	C	0	0	0	10		4		131	130			129		179			
704	$\phi 1 V 1$	C	0	0	0	0		3			139			140		175			
705	$\downarrow$	C	6	0	0	0		3			146			145		160			
706	$\downarrow$	C	0	0	0	10		1								178			
707	$\phi 1 V \phi F F$	C	0	0	0	-		3			142			141		174			
708	$\downarrow$	C	6	0	0	-		3			143			144		161			
709	$\phi 1 C 1$	C	0	0	0	0		5		132	133			134		177		183	
710	$\downarrow$	C	6	0	0	0		5		152	151			150		158		163	
711	$\phi 1 C 2$	C	0	0	0	0		5		137	136			135		176		184	
712	$\downarrow$	C	6	0	0	0		5		149	147			148		159		164	

1	7	13	19	25	31	37	43	49	55	61	67	7576
CN	ICN	CA	CAF	ICBL	CLM	CYN				MACH	ALPHA	7
										BETA		

COEFFICIENTS:

IDPVAR(1) IDPVAR(2) INDV

 $\alpha$  or  $\beta$ 

SCHEDULES

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONTINUED)*Booster @ Booster MRC Pitch Plane*☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL	DEFLECTION	NO. OF RUNS	MACH NUMBERS									
		A	B				0.4	0.6	0.7	0.9	0.95	1.1	1.5	2.2	2.5	4.5
RD7801	B1	A	D	-		4										
802	B2	A	C	-		4										
803	B2S	A	C	-		4										
804	B3	A	C	-		4										
805	B4	A	D	-		4										
806	B1S1	E	D	-		6										
807	B1S2	E	D	-		6										
808	B1D2	E	D	75		6										
809	B1D2	F	D	75		2										
810	B1D2	E	D	45		3										
811	B1D6	E	D	75		6										
812	B1D7	E	D	75		6										

CN CY CA CAF CB2 CLM CYN MACH ALPHA T  
 COEFFICIENTS: F = 30° 61° IDPVAR(1) IDPVAR(2) IDV

a or b  
 SCHEDULES

RD78AX	BOOSTER (a)	TANK T1	MRC	PITCH PLANE
RD78BX	BOOSTER (a)	TANK T3	MRC	PITCH PLANE

☐ PRETEST  
☒ POSTTEST

[illegible]

TABLE 2. TEST S-222 DATA SET COLLATION SHEET (CONCLUDED)

RD79XX BOOSTER @ BOOSTER MRC YAW PLANE  
 RD79AX BOOSTER @ TANK T1 MRC YAW PLANE  
 RD79BX BOOSTER @ TANK T3 MRC YAW PLANE

☐ PRETEST  
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION	NO. of RUNS	MACH NUMBERS									
		a	R			0.9	1.1	2.2	4.5						
RD7901	B1	0	A	—	4	117	116	170	169						
902	B2	0	A	—	4	120	121	172	166						
903	B2S	0	A	—	4	123	122	173	167						
904	B3	0	A	—	4	119	118	171	168						
905	B4	0	A	—	4	113	112	188	195						
9A1	B1	0	A	—	4	117	116	170	169						
9A2	B2	0	A	—	4	120	121	172	166						
9A3	B2S	0	A	—	4	123	122	173	167						
9A4	B3	0	A	—	4	119	118	171	168						
9A5	B4	0	A	—	4	113	112	188	195						
9B1	B1	0	A	—	4	117	116	170	169						
9B2	B2	0	A	—	4	120	121	172	166						
9B3	B2S	0	A	—	4	123	122	173	167						
9B4	B3	0	A	—	4	119	118	171	168						
9B5	B4	0	A	—	4	113	112	188	195						

1 7 13 19 25 31 37 43 49 55 61 67 7576  
 CN CY CA CAA CBL CLM CYN MACH BETA 7  
 COEFFICIENTS: IDPVAR(1) IDPVAR(2) NDV

a or b  
 SCHEDULES

TABLE 3. MODEL COMPONENT DESCRIPTIONS

MODEL COMPONENT: BODY - B<sub>1</sub> , B<sub>2</sub>

GENERAL DESCRIPTION: 040A Orbiter Body

B<sub>1</sub> INCLUDES CANOPY

B<sub>2</sub> WITHOUT CANOPY

DRAWING NUMBER: JLP SDD 9-24-71

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length, inch	<u>1315.</u>	<u>7.89</u>
Max. Width, inch	<u>204.</u>	<u>1.224</u>
Max. Depth , inch	<u>238.</u>	<u>1.427</u>
Fineness Ratio	<u>7.07</u>	<u>7.07</u>
Areas, inch		
Max. Cross-Sectional	<u>306.2 ft<sup>2</sup></u>	<u>1.590 in.<sup>2</sup></u>
Planform	<u>1676. ft<sup>2</sup></u>	<u>8.68 in.<sup>2</sup></u>
Wetted	<u>6530. ft<sup>2</sup></u>	<u>33.8 in.<sup>2</sup></u>
Base	<u>298. ft<sup>2</sup></u>	<u>1.546 in.<sup>2</sup></u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: WING, W1GENERAL DESCRIPTION: 040A Orbiter clipped delta wing

DRAWING NUMBER:

JLP SDD 9-24-71DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA, INCLUDES ELEVONS

Area		
Planform	3155.3 ft <sup>2</sup>	16.37 in. <sup>2</sup>
Wetted	5360. ft <sup>2</sup>	27.8 in. <sup>2</sup>
Span (equivalent), inch	882.	5.292
Aspect Ratio	1.712	1.712
Rate of Taper	--	--
Taper Ratio	.1486	.1486
Diehedral Angle, degrees	7.0	7.0
Incidence Angle, degrees	1.5	1.5
Aerodynamic Twist, degrees	0	0
Toe-In Angle	--	--
Cant Angle	--	--
Sweep Back Angles, degrees		
Leading Edge	60.	60.
Trailing Edge	0	0
0.25 Element Line	52.4	52.4
Chords: inch		
Root (Wing Sta. 0.0)	897.	5.38
Tip, (equivalent) (Y = 441)	133.3	.800
MAC	609.5	3.657
Fus. Sta. of .25 MAC	X 1057.5	6.36
W.P. of .25 MAC	Z 302.3	1.812
B.L. of .25 MAC	Y 165.7	.996
Airfoil Section		
Root	NACA 0008-64	NACA 0008-64
Tip	NACA 0008-64	NACA 0008-64

EXPOSED DATA, INCLUDES ELEVONS

Area	2010. ft <sup>2</sup>	14.45 in. <sup>2</sup>
Span, (equivalent), inch	678.	4.07
Aspect Ratio	1.590	1.590
Taper Ratio	.1850	.1850
Chords, inch		
Root (Y102)	720.	4.32
Tip (Y441)	133.3	.800
MAC	494.	2.97
Fus. Sta. of .25 MAC	X 1145.5	6.87
W.P. of .25 MAC	Z 308.1	1.87
B.L. of .25 MAC	Y 232.8	1.397

TABLE 3. (CONTINUED)

MODEL COMPONENT: ELEVONSGENERAL DESCRIPTION: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_DRAWING NUMBER:JLP SDD 9-24-71DIMENSIONS: (FOR BOTH ELEVONS)FULL-SCALEMODEL SCALE

Area	<u>456. ft<sup>2</sup></u>	<u>2.36 in.<sup>2</sup></u>
Span (equivalent), INCH	<u>556.</u>	<u>3.33</u>
Inb'd equivalent chord, INCH	<u>118.</u>	<u>.708</u>
Outb'd equivalent chord, INCH	<u>118.</u>	<u>.708</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>.1662</u>	<u>.1662</u>
At Outb'd equiv. chord	<u>.517</u>	<u>.517</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0</u>	<u>0</u>
Tailing Edge	<u>0</u>	<u>0</u>
Hingeline	<u>0</u>	<u>0</u>
Area Moment (Normal to hinge line)	<u>2240. ft<sup>3</sup></u>	<u>.835 in.<sup>2</sup></u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: VERTICAL FIN, VIGENERAL DESCRIPTION: 040A Orbiter Vertical Fin. Both leading and trailing edges  
swant.DRAWING NUMBER: JLP SDD 9-24-71DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA, INCLUDES RUDDER, EXCLUDES TIP POD

Area		
Planform	342. ft <sup>2</sup>	1.772 in. <sup>2</sup>
Wetted	684. ft <sup>2</sup>	3.55 in. <sup>2</sup>
Span (equivalent)	246.2	1.480
Aspect Ratio	1.228	1.228
Rate of Taper	--	--
Taper Ratio	.374	.374
Diehedral Angle, degrees	--	--
Incidence Angle, degrees	0	0
Aerodynamic Twist, degrees	0	0
Toe-In Angle	--	--
Cant Angle	--	--
Sweep Back Angles, degrees		
Leading Edge	45.	45.
Trailing Edge	15.	15.
0.25 Element Line	40.75	40.75
Chords: INCH		
Root (NACA 0012-64) (Z 500)	291.6	1.750
Tip, (equivalent) (Z 746.2)	109.0	.654
MAC	214.0	1.284
Fus. Sta. of .25 MAC	X 1422.7	--
W.P. of .25 MAC	Z 604.2	--
B.L. of .25 MAC	0	--
Airfoil Section		
Root	NACA 0012-64	NACA 0012-64
Tip	4 " "	" " "

EXPOSED DATA

Area  
Span, (equivalent)  
Aspect Ratio  
Taper Ratio  
Chords  
Root  
Tip  
MAC  
Fus. Sta. of .25 MAC  
W.P. of .25 MAC  
B.L. of .25 MAC

SAME  
AS  
ABOVE



TABLE 3. (CONTINUED)

MODEL COMPONENT: RUDDER- R1GENERAL DESCRIPTION: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_DRAWING NUMBER:JLP SDD 9-24-71DIMENSIONS:FULL-SCALEMODEL SCALE

Area

135.6 ft<sup>2</sup>.702 in.<sup>2</sup>

Span (equivalent), INCH

246.31.475

Inb'd equivalent chord, INCH

115..690

Outb'd equivalent chord, INCH

43.8.263Ratio movable surface chord/  
total surface chord

At Inb'd equiv. chord

.40.40

At Outb'd equiv. chord

.40.40

Sweep Back Angles, degrees

Leading Edge

29.129.1

Tailing Edge

15.015.0

Hingeline

29.129.1

Area Moment (Normal to hinge line)

448. ft<sup>3</sup>.145 in.<sup>3</sup>

TABLE 3. (CONTINUED)

MODEL COMPONENT: VERTICAL TAIL - V2GENERAL DESCRIPTION: Centerline StabilizerDRAWING NUMBER:NRDIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area

Planform

Wetted

Span (equivalent)

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, degrees

Incidence Angle, degrees

Aerodynamic Twist, degrees

Toe-In Angle

Cant Angle

Sweep Back Angles, degrees

Leading Edge

Trailing Edge

0.25 Element Line

Chords:

Root (Wing Sta. 0.0)

Tip, (equivalent)

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section

Root

Tip

EXPOSED DATA

Area

Span, (equivalent)

Aspect Ratio

Taper Ratio

Chords

Root

Tip

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

69,837.3 in<sup>2</sup>2.514 in<sup>2</sup>

369.17 in

2.215 in

1.95

1.95

0.3137

.3137

288.0 in

1.728 in

90.35 in

0.542 in

206.38 in

1.238 in

1469.04

8.814

652.44

3.915

0

0

TABLE 3. (CONTINUED)

MODEL COMPONENT: RUDDER R<sub>2</sub>

GENERAL DESCRIPTION: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

DRAWING NUMBER: \_\_\_\_\_

DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>181 ft<sup>2</sup></u>	<u>.939 in<sup>2</sup></u>
Span (equivalent)	<u>346 in</u>	<u>2.073 in</u>
Inb'd equivalent chord	<u>115 in</u>	<u>.691 in</u>
Outb'd equivalent chord	<u>36 in</u>	<u>.217 in</u>
Ratio Elevator chord/horizontal tail chord		
At Inb'd equiv. chord	<u>.40</u>	<u>.40</u>
At Outb'd equiv. chord	<u>.40</u>	<u>.40</u>
Sweep Back Angles, degrees		
Leading Edge	<u>32°</u>	<u>32°</u>
Tailing Edge	<u>21°</u>	<u>21°</u>
Hingeline	<u>32°</u>	<u>32°</u>
Area Moment (Normal to hinge line)	<u>569 ft<sup>3</sup></u>	<u>.212 in<sup>3</sup></u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - ACPS ENGINE POD . P1GENERAL DESCRIPTION: Blunt pod mounted on both wing tips.

DRAWING NUMBER:

JLP SDD 9-24-71DIMENSIONS:FULL-SCALEMODEL SCALE

Length, inch	<u>165.</u>	<u>.990</u>
Max. Width, inch	<u>55.</u>	<u>.330</u>
Max. Depth, inch	<u>28.</u>	<u>.168</u>
Fineness Ratio	<u>--</u>	<u>--</u>
Areas, in. <sup>2</sup>		
Max. Cross-Sectional	<u>1540.</u>	<u>.0555</u>
Planform	<u>8280.</u>	<u>.298</u>
Wetted	<u>15,800.</u>	<u>.568</u>
Base	<u>1540.</u>	<u>.0555</u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - OMS ENGINE POD, MIGENERAL DESCRIPTION: Pods mounted on both sides of aft end of fuselage.DRAWING NUMBER:JLP SDD 9-24-71DIMENSIONS:FULL-SCALEMODEL SCALE

Length, inch

251.1.509

Max. Width, inch

42.8.257

Max. Depth, inch

59.0.354

Fineness Ratio

----Areas, in.<sup>2</sup>

Max. Cross-Sectional

1828..0658

Planform

9880..356

Wetted

25,400..915

Base

1807..0651

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - HO Tank - T<sub>2</sub>

GENERAL DESCRIPTION: \_\_\_\_\_

Blunt cone-cylinder centerline tank with aft boat tail. $\theta_{\text{cone}} = 10^\circ$ . Nose radius = 22 in. full-scale.Diameter at base = 274 in. full-scale.DRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length

2022 in.12.133 in.

Max. Width

301 in.1.806 in.

Dia.

Max. Depth

301 in.1.806 in.

Fineness Ratio

6.736.73

Area

Max. Cross-Sectional

494 ft<sup>2</sup>2.562 in.<sup>2</sup>

Planform

------

Wetted

------

Base

422 ft<sup>2</sup>2.125 in.<sup>2</sup>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - H0 Tank - T<sub>1</sub>

GENERAL DESCRIPTION: \_\_\_\_\_

Blunt cone-cylinder centerline tank with aft boat tail. $\theta_{\text{cone}} = 15^\circ$ . Nose radius = 22 in. full-scale.Diameter at base = 274 in. full-scale.DRAWING NUMBER: \_\_\_\_\_DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>1867 in.</u>	<u>11.205 in.</u>
Max. Width	<u>301 in.</u>	<u>1.806 in.</u>
Max. Depth <span style="margin-left: 20px;">Dia.</span>	<u>301 in.</u>	<u>1.806 in.</u>
Fineness Ratio	<u>6.2</u>	<u>6.2</u>
Area		
Max. Cross-Sectional	<u>494 ft<sup>2</sup></u>	<u>2.562 in.<sup>2</sup></u>
Planform	<u>---</u>	<u>---</u>
Wetted	<u>---</u>	<u>---</u>
Base	<u>422 ft<sup>2</sup></u>	<u>2.125 in.<sup>2</sup></u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - HO Tank - T<sub>3</sub>

GENERAL DESCRIPTION: \_\_\_\_\_

Blunt cone-cylinder centerline tank with aft boat tail. $\theta$  cone = 10°. Nose radius = 22 in. full-scale.Diameter at base = 304 in. full-scale.DRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length

1914 in.11.442 in.

Max. Width

323.5 in.1.941 in.

Dia.

Max. Depth

323.5 in.1.941 in.

Fineness Ratio

5.925.92

Area

Max. Cross-Sectional

587 ft<sup>2</sup>2.959 in.<sup>2</sup>

Planform

------

Wetted

------

Base

518 ft<sup>2</sup>2.613 in.<sup>2</sup>



TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - HO-TANK-T<sub>4</sub>GENERAL DESCRIPTION: Blunt Cone-Cylinder Centerline Tank with Aft Boat Tail $\theta_{\text{Cone}} = 20^\circ$ . Nose Radius = 22 In. Full-Scale. Maximum Diameter = 334 In.Full Scale.DRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length

1700 In.10.200 In.

Max. Width

334 In.2.004 In.

Dia.

Max. Depth

334 In.2.004 In.

Fineness Ratio

5.095.09

Area

Max. Cross-Sectional

608 Ft.<sup>2</sup>3.154 In.<sup>2</sup>

Planform

------

Wetted

------

Base

537 Ft.<sup>2</sup>2.785 In.<sup>2</sup>

TABLE 3. (CONTINUED)

MODEL COMPONENT: TANK VENTRAL FIN, F<sub>1</sub>GENERAL DESCRIPTION: Single Fin Mounted on Tank, T<sub>4</sub>.Fin has no movable surface.DRAWING NUMBER: \_\_\_\_\_

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>337 Ft.<sup>2</sup></u>	<u>1.747 In.<sup>2</sup></u>
Span (equivalent)	<u>237 In.</u>	<u>1.420 In.</u>
Inb'd equivalent chord	<u>323 In.</u>	<u>1.940 In.</u>
Outb'd equivalent chord	<u>87 In.</u>	<u>0.520 In.</u>
Ratio Elevator chord/horizontal tail chord		
At Inb'd equiv. chord	<u>---</u>	<u>---</u>
At Outb'd equiv. chord	<u>---</u>	<u>---</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45</u>	<u>45</u>
Tailing Edge	<u>0</u>	<u>0</u>
Hingeline	<u>---</u>	<u>---</u>
Area Moment (Normal to hinge line)	<u>---</u>	<u>---</u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - Booster, B<sub>1</sub>

GENERAL DESCRIPTION: Parallel burn version of recoverable pressure-fed booster (RPFB). Blunt cone-cylinder with afterbody flare.  $\theta_{\text{cone}} = 20^\circ$ .  $\theta_{\text{flare}} = 15^\circ$ .

Nose radius = 22 in. full-scale.

DRAWING NUMBER: \_\_\_\_\_

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>1799 in.</u>	<u>10.792 in.</u>
Dia. Body	<u>206 in.</u>	<u>1.236 in.</u>
Max. Dia. Flare	<u>402 in.</u>	<u>2.412 in.</u>
Fineness Ratio	<u>8.73</u>	<u>8.73</u>
Area		
Cross-Sectional (Body)	<u>231 ft<sup>2</sup></u>	<u>1.200 in.<sup>2</sup></u>
Planform	<u>---</u>	<u>---</u>
Wetted	<u>---</u>	<u>---</u>
Base (flare)	<u>901 ft<sup>2</sup></u>	<u>4.539 in.<sup>2</sup></u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: CODY - Booster, B SGENERAL DESCRIPTION: Pressure-Fed BoosterDRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length

1799 In.10.792 In.

Dia. Body

206 In.1.236 In.

Max. Dia. Flare

624 In.3.744 In.

Fineness Ratio

8.738.73

Area

Max. Cross-Sectional (Body)

231 Ft<sup>2</sup>1.200 In.<sup>2</sup>

Planform

------

Wetted

------

Base (Flare)

2125 Ft<sup>2</sup>11.0093 In.<sup>2</sup>

TABLE 3.. (CONTINUED)

MODEL COMPONENT: CODY - Booster, B<sub>1</sub>S<sub>2</sub>GENERAL DESCRIPTION: Pressure-Fed BoosterDRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length

1799 In.10.792 In.

Dia. Body

206 In.1.236 In.

Max. Dia. Flare

936.3 In.5.618 In.

Fineness Ratio

8.738.73

Area

Max. Cross-Sectional (Body)

231 Ft<sup>2</sup>1.200 In.<sup>2</sup>

Planform

------

Wetted

------

Base (Flare)

4785 Ft<sup>2</sup>24.7887 In.<sup>2</sup>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - Booster - B<sub>2</sub>

GENERAL DESCRIPTION: \_\_\_\_\_

SRM Booster . Blunt cone-cylinder.  $\theta$  cone = 20°. Nose radius = 15.67 in.  
full-scale.

DRAWING NUMBER: \_\_\_\_\_

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>1775 in.</u>	<u>10.633 in.</u>
Max. Width	<u>156 in.</u>	<u>0.936 in.</u>
Dia.		
Max. Depth	<u>156 in.</u>	<u>0.936 in.</u>
Fineness Ratio	<u>11.37</u>	<u>11.37</u>
Area		
Max. Cross-Sectional	<u>137.8 ft<sup>2</sup></u>	<u>0.694 in.<sup>2</sup></u>
Planform	<u>---</u>	<u>---</u>
Wetted	<u>---</u>	<u>---</u>
Base	<u>137.8 ft<sup>2</sup></u>	<u>0.694 in.<sup>2</sup></u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - Booster - B<sub>2</sub>S

GENERAL DESCRIPTION: \_\_\_\_\_

SRM Booster , B<sub>2</sub> booster with 15° afterbody flare. Nose radius = 16.67  
in. full-scale.

DRAWING NUMBER: \_\_\_\_\_

DIMENSIONS:FULL-SCALEMODEL SCALE

Length

1775 in.10.633 in.

Dia. Body

156 in.0.936 in.

Max. Dia. Flare

275 in.1.650 in.

Fineness Ratio

11.3711.37

Area

Cross Sectional (Body)

137.8 ft<sup>2</sup>0.694 in.<sup>2</sup>

Planform

------

Wetted

------

Base (Flare)

428 ft<sup>2</sup>2.158 in.<sup>2</sup>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - Booster - B<sub>3</sub>GENERAL DESCRIPTION: Parallel burn version of recoverable pressure-fed booster (RPFb). Blunt cone-cylinder with afterbody flare.  $\theta$  cone = 15°.Nose radius - 22 in. full-scale.  $\theta$  Flare = 15°DRAWING NUMBER: \_\_\_\_\_DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>1800 in.</u>	<u>10.800 in.</u>
Dia. Body	<u>206 in.</u>	<u>1.236 in.</u>
Max. Dia. Flare	<u>402 in.</u>	<u>2.412 in.</u>
Fineness Ratio	<u>8.74</u>	<u>8.74</u>
Area		
Cross-Sectional (Body)	<u>231 ft<sup>2</sup></u>	<u>1.200 in.<sup>2</sup></u>
Planform	<u>---</u>	<u>---</u>
Wetted	<u>---</u>	<u>---</u>
Base (Flare)	<u>902 ft<sup>2</sup></u>	<u>4.545 in.<sup>2</sup></u>



TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - Booster - B<sub>4</sub>

GENERAL DESCRIPTION: Parallel burn version of recoverable pressure-fed  
booster (RPFB). Blunt cone-cylinder with afterbody flare.  $\theta_{\text{cone}} = 20^\circ$ .  
 $\theta_{\text{flare}} = 5^\circ$ . Nose radius = 22 in. full scale.

DRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length	<u>1503 in.</u>	<u>9.025 in.</u>
Dia. Body	<u>247 in.</u>	<u>1.483 in.</u>
Max. Dia. Flare	<u>318 in.</u>	<u>1.909 in.</u>
Fineness Ratio	<u>6.09</u>	<u>6.09</u>
Area		
Cross-Sectional (Body)	<u>343 ft<sup>2</sup></u>	<u>1.727 in.<sup>2</sup></u>
Planform	<u>---</u>	<u>---</u>
Wetted	<u>---</u>	<u>---</u>
Base (Flare)	<u>568 ft<sup>2</sup></u>	<u>2.865 in.<sup>2</sup></u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: Fin, F<sub>4</sub>GENERAL DESCRIPTION: Single fin mounted on each B<sub>4</sub> booster flare.Roll-out angle is 45° down. Fin has no movable surface.

DRAWING NUMBER: \_\_\_\_\_

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area (exposed planform, 1 fin)	<u>503 ft<sup>2</sup></u>	<u>2.610 in<sup>2</sup></u>
Span (equivalent, to booster C <sub>4</sub> )	<u>424 in</u>	<u>2.544 in</u>
Inb'd equivalent chord	<u>410 in</u>	<u>2.460 in</u>
Outb'd equivalent chord	<u>110 in</u>	<u>0.660 in</u>
Ratio Elevator chord/horizontal tail chord		
At Inb'd equiv. chord	<u>---</u>	<u>---</u>
At Outb'd equiv. chord	<u>---</u>	<u>---</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45</u>	<u>45</u>
Tailing Edge	<u>0</u>	<u>0</u>
Hingeline	<u>---</u>	<u>---</u>
Area Moment (Normal to hinge line)	<u>---</u>	<u>---</u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - Booster, B<sub>5</sub>GENERAL DESCRIPTION: Pressure-Fed BoosterDRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length

1799 In.10.792 In.

Dia. Body

206 In.1.236 In.

Max. Dia. Flare

319.3 In.1.916 In.

Fineness Ratio

8.738.73

Area

Max. Cross-Sectional (Body)

231 Ft<sup>2</sup>1.200 In.<sup>2</sup>

Planform

------

Wetted

------

Base (Flare)

557 Ft<sup>2</sup>2.88 In.<sup>2</sup>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - Booster, B5

GENERAL DESCRIPTION: SRM Booster

DRAWING NUMBER \_\_\_\_\_

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length	<u>1613 in.</u>	<u>9.673 in.</u>
Ø1a. (Body)	<u>156 in.</u>	<u>0.936 in.</u>
Max Depth	<u>156 in.</u>	<u>0.936 in.</u>
Fineness Ratio	<u>10.35</u>	<u>10.35</u>
Area		
Max Cross-Sectional	<u>137.8 ft<sup>2</sup></u>	<u>0.694 in<sup>2</sup></u>
Planform	<u>---</u>	<u>---</u>
Wetted	<u>---</u>	<u>---</u>
Base (Nozzle)	<u>95.4 ft<sup>2</sup></u>	<u>0.481 in<sup>2</sup></u>

TABLE 3. (CONTINUED)

MODEL COMPONENT: BODY - Booster, B<sub>7</sub>GENERAL DESCRIPTION: 120" Dia. SRMDRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length

1403 In.8.418 In.

Dia. Body

120 In.0.72 In.

Max. Dia. Flare

------

Fineness Ratio

11.711.7

Area

Max. Cross-Sectional (Body)

79.3 Ft<sup>2</sup>0.408 In.<sup>2</sup>

Planform

------

Wetted

------

Base

79.3 Ft<sup>2</sup>0.408 In.<sup>2</sup>

TABLE 3. (CONCLUDED)

MODEL COMPONENT: CODY - TVC Tank A1 for B<sub>7</sub>GENERAL DESCRIPTION: Thrust Vectoring Fuel TankDRAWING NUMBER: \_\_\_\_\_DIMENSIONS:FULL-SCALEMODEL SCALE

Length	<u>381.8 In.</u>	<u>2.291 In.</u>
Dia. Body	<u>42 In.</u>	<u>0.252 In.</u>
Max. Dia. Flare	<u>---</u>	<u>---</u>
Fineness Ratio	<u>9.08</u>	<u>9.08</u>
Area		
Max. Cross-Sectional (Body)	<u>9.65 Ft<sup>2</sup></u>	<u>0.05 In.<sup>2</sup></u>
Planform	<u>---</u>	<u>---</u>
Wetted	<u>---</u>	<u>---</u>
Base	<u>---</u>	<u>---</u>

TABLE 4.

## Plume Definition

$$M = 1.5$$

$\frac{B_1}{r_e = 187 \text{ in.}}$		$\frac{B_6}{r_e = 66 \text{ in.}}$		$\frac{O_1 (3 \text{ Eng. -HiPc})}{r_e = 92.5 \text{ in.}}$	
$x/r_e$	$r/r_e$	$x/r_e$	$r/r_e$	$x/r_e$	$r/r_e$
0	1.00	0	1.00	0	1.0
0.5	1.17	0.5	1.23	0.5	1.0
1.0	1.22	1.0	1.48	1.0	1.0
1.5	1.23	1.5	1.70	1.5	1.0
2.0	1.20	2.0	1.88	2.0	1.0
		2.5	2.00		
		3.0	2.11		

$$M = 2.2$$

$\frac{B_6}{r_e = 66 \text{ in.}}$		$\frac{O_1 (3 \text{ Eng. -HiPc})}{r_e = 118 \text{ in.}}$	
$x/r_e$	$r/r_e$	$x/r_e$	$r/r_e$
0	1.00	0	1.00
0.5	1.33	0.5	1.10
1.0	1.62	1.0	1.20
1.5	1.88	1.5	1.26
2.0	2.13	2.0	1.33
2.5	2.33	2.5	1.41
3.0	2.51	3.0	1.47
4.0	2.84	4.0	1.57
5.0	3.12	5.0	1.62
6.0	3.35	6.0	1.65
7.0	3.55	7.0	1.66
8.0	3.72	8.0	1.64
9.0	3.87		
10.0	3.97		
11.0	4.03		
12.0	4.11		
13.0	4.15		
14.0	4.17		

TABLE 4, cont.

 $M = 2.5$ 

$\frac{B_1}{r_e} = 187 \text{ in.}$		$\frac{O_1 (4 \text{ Eng.-J2S})}{r_e} = 89 \text{ in.}$	
$x/r_e$	$r/r_e$	$x/r_e$	$r/r_e$
0	1.00	0	1.00
0.5	1.34	0.5	1.21
1.0	1.53	1.0	1.34
1.5	1.77	1.5	1.46
2.0	1.91	2.0	1.56
2.5	2.03	2.5	1.61
3.0	2.13	3.0	1.67
4.0	2.30	4.0	1.71
5.0	2.30	5.0	1.75
6.0	2.23		

B7 $M = 1.5$ 

$r_e = 60 \text{ in.}$		$M = 2.2$ $r_e = 60 \text{ in.}$	
$x/r_e$	$r/r_e$	$x/r_e$	$r/r_e$
0	1.00	0	1.00
0.026	1.01	0.04	1.02
0.100	1.05	0.17	1.09
0.240	1.10	0.23	1.12
0.320	1.14	0.30	1.16
0.430	1.18	0.38	1.20
0.680	1.27	0.48	1.24
1.000	1.34	0.58	1.29
1.400	1.50	0.70	1.34
1.870	1.61	0.83	1.40
2.430	1.72	1.13	1.52
3.410	1.87	1.30	1.60
4.150	1.94	1.69	1.73
4.970	1.98	2.13	1.87
5.830	2.00	2.64	2.02
		3.22	2.17
		3.87	2.31
		4.58	2.45
		5.36	2.57



TABLE 5.

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TABLE 6. INDEX OF DATA FIGURES

TITLE	PLOTTED		CONDITIONS VARYING	VOLUME/ PAGE NO.
	COEFFICIENTS	SCHEDULE		
Longitudinal Effects of a B1 Booster on (01)T1B1 at Beta = 0	A		Ascent Configuration Booster Isolation	I/1-50
Longitudinal Effects of a B1 Booster on (01)T1B1 at Beta = 6	A		Ascent Configuration Booster Isolation	I/51-80
Lateral-Directional Effects of a B1 Booster on (01)T1B1 at Beta = 0	B		Ascent Configuration Booster Isolation	I/81-95
Lateral-Directional Effects of a B1 Booster on (01)T1B1 at Beta = 6	B		Ascent Configuration Booster Isolation	I/96-104
Lateral-Directional Effects of a B1 Booster on (01)T1B1 with Beta at Alpha = 0	D		Ascent Configuration Booster Isolation	I/105-110
Longitudinal Effects of a B1 Booster on (01)T1B1 with Beta at Alpha = 0	E		Ascent Configuration Booster Isolation	I/111-120
Effect of Beta on Longitudinal Characteristics of 01T1B1	A		Beta	I/121-180
Effect of Beta on Lateral-Directional Characteristics of 01T1B1	B		Beta	I/181-198
Lateral-Directional Characteristics of Configuration 01T1B1 with Beta at Alpha = 0	C			I/199-218
Aileron Effectiveness of Configuration (01)T1B1 at Beta = 0	B		Aileron Deflection	I/219-236
Aileron Effectiveness of Configuration 01T1B1 at Beta = 0	B		Aileron Deflection	I/237-239
Variation of Aileron Control at Alpha = 0 with Beta of 01T1B1	C		Aileron Deflection	I/240-243
Longitudinal Effects of a B2 Booster on (01)T1B2 at Beta = 6	A		Ascent Configuration Booster Isolation	I/244-303

TABLE 6. (CONTINUED)

TITLE	PLOTTED		CONDITIONS VARYING	VOLUME/ PAGE NO.
	COEFFICIENTS	SCHEDULE		
Lateral-Directional Effects of a B2 Booster on (01)T1B2 at Beta = 6	B		Ascent Configuration Booster Isolation	I/304-309
Effect of Beta on Longitudinal Characteristics of 01T1B2	A		Beta	I/310-369
Effect of Beta on Lateral-Directional Characteristics of 01T1B2	B		Beta	I/370-387
Effect of Beta on Longitudinal Characteristics of 01T1B2S	A		Beta	I/388-447
Effect of Beta on Lateral-Directional Characteristics of 01T1B2S	B		Beta	I/448-465
Longitudinal Effects of a B3 Booster on (01)T1B3 at Beta = 0	A		Ascent Configuration Booster Isolation	I/466-525
Longitudinal Effects of a B3 Booster on (01)T1B3 at Beta = 6	A		Ascent Configuration Booster Isolation	I/526-545
Lateral-Directional Effects of a B3 Booster on (01)T1B3 at Beta = 0	B		Ascent Configuration Booster Isolation	I/546-557
Lateral-Directional Effects of a B3 Booster on (01)T1B3 at Beta = 6	B		Ascent Configuration Booster Isolation	I/558-563
Lateral-Directional Effects of a B3 Booster on (01)T1B3 with Beta at Alpha = 0	D		Ascent Configuration Booster Isolation	I/564-569
Longitudinal Effects of a B3 Booster on (01)T1B3 with Beta at Alpha = 0	E		Ascent Configuration Booster Isolation	I/570-579

TABLE 6. (CONTINUED)

TITLE	PLOTTED		CONDITIONS VARYING	VOLUME/ PAGE NO.
	COEFFICIENTS	SCHEDULE		
Longitudinal Effects of a B4 Booster on (01)TLB4 at Beta = 0	A		Ascent Configuration Booster Isolation	I/580-639
Longitudinal Effects of a B4 Booster on (01)TLB4 at Beta = 6	A		Ascent Configuration Booster Isolation	I/640-659
Lateral-Directional Effects of a B4 Booster on (01)TLB4 at Beta = 0	B		Ascent Configuration Booster Isolation	I/660-674
Lateral-Directional Effects of a B4 Booster on (01)TLB4 at Beta = 6	B		Ascent Configuration Booster Isolation	I/675-680
Lateral-Directional Effects of a B4 Booster on (01)TLB4 with Beta at Alpha = 0	D		Ascent Configuration Booster Isolation	I/681-689
Longitudinal Effects of a B4 Booster on (01)TLB4 with Beta at Alpha = 0	E		Ascent Configuration Booster Isolation	I/690-704
Longitudinal Effects of a B5 Booster on (01)TLB5 at Beta = 6	A		Ascent Configuration Booster Isolation	I/705-724
Lateral-Directional Effects of a B5 Booster on (01)TLB5 at Beta = 6	B		Ascent Configuration Booster Isolation	I/725-730
Longitudinal Effects of a B5 Booster on (01V1)TLB5 at Beta = 0	A		Ascent Configuration Booster Isolation	I/731-790
Longitudinal Effects of a B5 Booster on (01V1)TLB5 at Beta = 6	A		Ascent Configuration Booster Isolation	I/791-800
Lateral-Directional Effects of a B5 Booster on (01V1)TLB5 at Beta = 0	B		Ascent Configuration Booster Isolation	I/801-812
Lateral-Directional Effects of a B5 Booster on (01V1)TLB5 at Beta = 6	B		Ascent Configuration Booster Isolation	I/813-815
Lateral-Directional Effects of a B5 Booster on (01V1)TLB5 with Beta at Alpha = 0	D		Ascent Configuration Booster Isolation	I/816-824

TABLE 6. (CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Longitudinal Effects of a B5 Booster on (O1VL)TLB5 with Beta at Alpha = 0	E	Ascent Configuration Booster Isolation	I/825-839
Longitudinal Characteristics of (O1)TLB6 at Beta = 0	A	Mach No.	I/840-849
Lateral-Directional Characteristics of (O1)TLB6 at Alpha = 0	C	Mach No.	I/850-853
Longitudinal Characteristics of (O1)TLB6 with Ailerons = 20 at Beta = 0	A	Mach No.	I/854-863
Lateral-Directional Characteristics of (O1)TLB6 with Ailerons = 20 at Beta = 0	B	Mach No.	I/864-866
Lateral-Directional Characteristics of (O1)TLB6 with Ailerons = 20 at Alpha = 0	D	Mach No.	I/867-869
Longitudinal Characteristics of (O1)TLB6 with Ailerons = 20 at Alpha = 0	E	Mach No.	I/870-874
Tank Nose Cone Effect on Longitudinal Characteristics of Configuration (O1)TLB1 at Beta = 0	A	Configuration	I/875-904
Longitudinal Effects of a B1 Booster on (O1)TLB1 at Beta = 6	A	Ascent Configuration Booster Isolation	I/905-914
Lateral-Directional Effects of a B1 Booster on (O1)TLB1 at Beta = 6	B	Ascent Configuration Booster Isolation	I/915-917
Tank Nose Cone Effect on Longitudinal Characteristics of Configuration (O1VL)TLB5 at Beta = 0	A	Configuration	I/918-947
Tank Nose Cone Effect on Lateral-Directional Characteristics of Configuration (O1VL)TLB5 at Alpha = 0	C	Configuration	I/948-959



TABLE 6. (CONTINUED)

TITLE	PLOTTED		CONDITIONS VARYING	VOLUME/ PAGE NO.
	COEFFICIENTS	SCHEDULE		
Effect of Tank T2 Longitudinal Position on (01)T2B1 at Beta = 0	A		Configuration	I/960-989
Longitudinal Effects of a B1 Booster on (01)T2AB1 at Beta = 6	A		Ascent Configuration Booster Isolation	I/990-999
Lateral-Directional Effects of a B1 Booster on (01)T2AB1 at Beta = 6	B		Ascent Configuration Booster Isolation	I/1000-1002
Effect of Tank T2 Longitudinal Position on (01V1)T2B5 at Beta = 0	A		Configuration	I/1003-1032
Effect of Tank T2 Longitudinal Position on (01V1)T2B5 at Beta = 0	A		Configuration	I/1033-1062
Effect of Tank T2 Longitudinal Position on (01V1)T2B5 with Beta at Alpha = 0	C		Configuration	I/1063-1074
Effect of Tank T2 Longitudinal Position on (01V1)T2B5 with Beta at Alpha = 0	C		Configuration	I/1075-1082
Longitudinal Effects of a B1 Booster on (01)T3B1 at Beta = 0	A		Ascent Configuration Booster Isolation	II/1-40
Longitudinal Effects of a B1 Booster on (01)T3B1 at Beta = 6	A		Ascent Configuration Booster Isolation	II/41-60
Lateral-Directional Effects of a B1 Booster on (01)T3B1 at Beta = 0	B		Ascent Configuration Booster Isolation	II/61-72
Lateral-Directional Effects of a B1 Booster on (01)T3B1 at Beta = 6	B		Ascent Configuration Booster Isolation	II/73-78
Lateral-Directional Effects of a B1 Booster on (01)T3B1 with Beta at Alpha = 0	D		Ascent Configuration Booster Isolation	II/79-84

TABLE 6. (CONTINUED)

TITLE	PLOTTED		CONDITIONS VARYING	VOLUME PAGE NO.
	COEFFICIENTS	SCHEDULE		
Longitudinal Effects of a B1 Booster on (01)T3B1 with Beta at Alpha = 0	E		Ascent Configuration Booster Isolation	II/85-99
Longitudinal Effects of a B2 Booster on (01)T3B2 at Beta = 0	A		Ascent Configuration Booster Isolation	II/100-139
Lateral-Directional Effects of a B2 Booster on (01)T3B2 at Beta = 0	B		Ascent Configuration Booster Isolation	II/140-151
Lateral-Directional Effects of a B2 Booster on (01)T3B2 with Beta at Alpha = 0	C		Ascent Configuration Booster Isolation	II/152-157
Longitudinal Effects of a B2 Booster on (01)T3B2 with Beta at Alpha = 0	E		Ascent Configuration Booster Isolation	II/158-167
Longitudinal Characteristics of Configuration 01T3B2 at Beta = 0	A			II/168-177
Longitudinal Characteristics of Configuration 01T3B2 at Beta = 6	A		Mach No.	II/178-187
Lateral-Directional Characteristics of Configuration 01T3B2 at Beta = 6	B		Mach No.	II/188-190
Longitudinal Effects of a B3 Booster on (01)T3B3 at Beta = 0	A		Ascent Configuration Booster Isolation	II/191-230
Longitudinal Effects of a B3 Booster on (01)T3B3 at Beta = 6	A		Ascent Configuration Booster Isolation	II/231-240
Lateral-Directional Effects of a B3 Booster on (01)T3B3 at Beta = 0	B		Ascent Configuration Booster Isolation	II/241-252
Lateral-Directional Effects of a B3 Booster on (01)T3B3 at Beta = 6	B		Ascent Configuration Booster Isolation	II/253-255

TABLE 6. (CONTINUED)

TITLE	PICTURED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Lateral-Directional Effects of a B3 Booster on (01)T3B3 with Beta at Alpha = 0	D	Ascent Configuration Booster Isolation	II/256-261
Longitudinal Effects of a B3 Booster on (01)T3B3 with Beta at Alpha = 0	E	Ascent Configuration Booster Isolation	II/262-271
B3 Boosters Contribution to Longitudinal Characteristics of (01)T3B3 at Beta = 0	A	Configuration	II/272-321
B3 Boosters Contribution to Lateral-Directional Characteristics of (01)T3B3 at Alpha = 0	C	Configuration	II/322-333
Effect of Beta on Longitudinal Characteristics of 01T3B4	A	Beta	II/334-394
Effect of Beta on Lateral-Directional Characteristics of 01T3B4	B	Beta	II/394-411
Lateral-Directional Characteristics of 01T3B4 with Beta at Alpha = 0 and 6	C	Alpha	II/412-435
Lateral-Directional Characteristics of Configuration (01)T3B4 with Beta at Alpha = 0	C		II/436-439
Aileron Effectiveness of Configuration 01T3B4 at Beta = 0	B	Aileron Deflection	II/440-457
Aileron Effectiveness of Configuration (01)T3B4 at Beta = 0	B	Aileron Deflection	II/458-460
Effects of Alpha on Rudder Effectiveness of Configuration 01T3B4 at Beta = 0	B	Rudder Deflection	II/461-478
Effects of Alpha on Rudder Effectiveness of Configuration (01)T3B4 at Beta = 0	B	Rudder Deflection	II/479-481
Effect of Booster Fin F4 on Longitudinal Characteristics of 01T3B4 at Beta = 0	A	Configuration	II/482-541

TABLE 6. (CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Effect of Booster Fin F <sub>4</sub> on Longitudinal Characteristics of (01)T <sub>3B4</sub> at Beta = 0	A	Configuration	II/542-551
Effect of Booster Fin F <sub>4</sub> on Longitudinal Characteristics of (01)T <sub>3B4</sub> at Beta = 6	A	Configuration	II/552-611
Effect of Booster Fin F <sub>4</sub> on Lateral-Directional Characteristics of (01)T <sub>3B4</sub> at Beta = 6	B	Configuration	II/612-629
Longitudinal Effects of a B5 Booster on (01V1)T <sub>3B5</sub> at Beta = 0	A	Ascent Configuration Booster Isolation	II/630-669
Longitudinal Effects of a B5 Booster on (01V1)T <sub>3B5</sub> at Beta = 6	A	Ascent Configuration Booster Isolation	II/670-679
Lateral-Directional Effects of a B5 Booster on (01V1)T <sub>3B5</sub> at Beta = 0	B	Ascent Configuration Booster Isolation	II/680-691
Lateral-Directional Effects of a B5 Booster on (01V1)T <sub>3B5</sub> at Beta = 6	B	Ascent Configuration Booster Isolation	II/692-694
Lateral-Directional Effects of a B5 Booster on (01V1)T <sub>3B5</sub> with Beta at Alpha = 0	D	Ascent Configuration Booster Isolation	II/695-700
Longitudinal Effects of a B5 Booster on (01V1)T <sub>3B5</sub> with Beta at Alpha = 0	E	Ascent Configuration Booster Isolation	II/701-710
Effects of Beta on Longitudinal Characteristics of (01)T <sub>4B7A1-4</sub>	A	Beta	III/1-60
Effects of Beta on Lateral-Directional Characteristics of (01)T <sub>4B7A1-4</sub>	B	Beta	III/61-78

TABLE 6. (CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Longitudinal Characteristics of Configuration 01T <sub>4</sub> B7A1-4 at Beta = 0	A	Mach No.	III/79-88
Lateral-Directional Characteristics of Configuration 01T <sub>4</sub> B7A1-4 at Alpha = 0	C	Mach No.	III/89-92
Aileron Effectiveness of Configuration (01)T <sub>4</sub> B7A1-4 at Beta = 0	B	Aileron Deflection	III/93-110
Aileron Effectiveness of Configuration (01)T <sub>4</sub> B7A1-4 at Beta = 6	B	Aileron Deflection	III/111-128
Effects of Beta on Aileron Control of Configuration (01)T <sub>4</sub> B7A1-4 at Alpha = 0	C	Aileron Deflection	III/129-152
Effects of Aileron on Longitudinal Characteristics of Configuration (01)T <sub>4</sub> B7A1-4 at Beta = 6	A	Aileron Deflection	III/153-212
Effects of Alpha on Rudder Control of Configuration (01)T <sub>4</sub> B7A1-4 at Beta = 0	B	Rudder Deflection	III/213-230
Rudder Effectiveness of Configuration (01)T <sub>4</sub> B7A1-4 at Alpha = 0	C	Rudder Deflection	III/231-254
Effects of Beta on Lateral-Directional Characteristics of (01)T <sub>4</sub> B7A1-4 with Rudder = 10	B	Beta	III/255-272
Effects of A1 on Longitudinal Characteristics of (01)T <sub>4</sub> B7A1-4 at Beta = 0	A	Configuration	III/273-302
Effects of A1 on Lateral-Directional Characteristics of (01)T <sub>4</sub> B7A1-4 at Alpha = 0	C	Configuration	III/303-314
Effects of F <sub>1n</sub> FL on Longitudinal Characteristics of Configuration 01T <sub>4</sub> B7A1-4 at Beta = 0	A	Configuration	III/315-334

TABLE 6. (CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Effects of Fin F1 on Lateral-Directional Characteristics on Configuration 01T <sub>4</sub> B7A1-4 at Alpha = 0	C	Configuration	III/335-342
Effects of Fin F1 on Longitudinal Characteristics of Configuration T <sub>4</sub> B7A1-4 at Beta = 0	A	Configuration	III/343-402
Effects of Fin F1 on Lateral-Directional Characteristics on Configuration T <sub>4</sub> B7A1-4 at Alpha = 0	C	Configuration	III/403-426
Effects of B7A1-4 on Longitudinal Characteristics of Configuration (01)T <sub>4</sub> B7A1-4 at Beta = 0	A	Configuration	III/427-486
Effects of B7A1-4 on Lateral-Directional Characteristics of Configuration (01)T <sub>4</sub> B7A1-4 at Alpha = 0	C	Configuration	III/487-510
Comparison of the Longitudinal Characteristics of (01)T <sub>4</sub> B7A1-4 and (01)T <sub>4</sub> B7A1-5 at Beta = 0	A	Configuration	III/511-570
Comparison of the Lateral-Directional Characteristics of (01)T <sub>4</sub> B7A1-4 and (01)T <sub>4</sub> B7A1-5 at Beta = 0	B	Configuration	III/571-588
Comparison of the Lateral-Directional Characteristics of (01)T <sub>4</sub> B7A1-4 and (01)T <sub>4</sub> B7A1-5 at Alpha = 0	C	Configuration	III/589-612
Effects of Beta on Longitudinal Characteristics of (01)T <sub>4</sub> B7A1-5	A	Beta	III/613-672
Effects of Beta on Lateral-Directional Characteristics of (01)T <sub>4</sub> B7A1-5	B	Beta	III/673-690
Longitudinal Effect of Exhaust Plumes on Configuration 01T <sub>4</sub> B1 at Beta = 0	A	Plume	IV/ 1-20
Longitudinal Effect of Exhaust Plumes on Configuration 01T <sub>4</sub> B1 at Beta = 6	A	Plume	IV/21-30

TABLE 6. (CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Lateral-Directional Effect of Exhaust Plumes on Configuration O1T1B1 at Beta = 6	B	Plume	IV/31-33
Longitudinal Effect of M = 1.5 Exhaust Plumes on Configuration O1T1B1 at Beta = 0	A	Plume	IV/34-53
Lateral-Directional Effect of M=1.5 Exhaust Plumes on Configuration O1T1B1 at Alpha = 0	C	Plume	IV/54-61
Effect of Exhaust Plumes on Aileron Effectiveness of Configuration O1T1B1 on Beta = 0	B	Plume	IV/62-64
Effects of M=1.5 Exhaust Plumes on Aileron Effectiveness of Configuration O1T1B1 at Beta = 0	B	Plume and Aileron Deflection	IV/65-70
Variation of Aileron Control at Alpha = 0 with Beta and M=1.5 Exhaust Plumes O1T1B1	C	Plume and Aileron Deflection	IV/71-78
Variation of Rudder Control at Beta = 0 with Alpha and M=1.5 Exhaust Plumes O1T1B1	B	Plume and Rudder Deflection	IV/79-84
Effects of M=1.5 Exhaust Plumes on Rudder Effectiveness with Beta at Alpha = 0 of O1T1B1	C	Plume and Rudder Deflection	IV/85-92
Lateral-Directional Characteristics of Configuration O1T1B1 + Plume(2.5) with Deflected Rudder at Beta = 0	B		IV/93-95
Longitudinal Characteristics of Configuration O1T1B1+Plume(2.5) with Deflected Rudder at Beta = 0	A		IV/96-105
Longitudinal Effect of Mach No.=1.5 Exhaust Plumes on Configuration O1T3B6 at Beta = 0	A	Plume	IV/106-115

TABLE 6. (CONTINUED)

TITLE	PIOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Longitudinal Effect of Mach No=2.2 Exhaust Plumes on Configuration 01T3B6 at Beta = 0	A	Plume	IV/116-125
Lateral-Directional Effect of Mach No.=1.5 Exhaust Plumes on Configuration 01T3B6 at Alpha = 0	C	Plume	IV/126-129
Lateral-Directional Effect of Mach No=2.2 Exhaust Plumes on Configuration 01T3B6 at Alpha = 0	C	Plume	IV/130-133
Effects of M=1.5 Exhaust Plumes on Aileron Effectiveness of Configuration 01T3B6 at Beta = 0	B	Plume and Aileron Deflection	IV/134-136
Effects of M=2.2 Exhaust Plumes on Aileron Effectiveness of Configuration 01T3B6 at Beta = 0	B	Plume and Aileron Deflection	IV/137-139
Variation of Aileron Control at Alpha = 0 with Beta and M=1.5 Exhaust Plumes 01T3B6	C	Plume and Aileron Deflection	IV/140-143
Variation of Aileron Control at Alpha = 0 with Beta and M=2.2 Exhaust Plumes 01T3B6	C	Plume and Aileron Deflection	IV/144-147
Variation of Rudder Control at Beta = 0 with Alpha and M=1.5 Exhaust Plumes 01T3B6	B	Plume and Rudder Deflection	IV/148-150
Effects of M=1.5 Exhaust Plumes on Rudder Effectiveness with Beta at Alpha = 0 of 01T3B6	C	Plume and Rudder Deflection	IV/151-154
Variation of Rudder Control at Beta = 0 with Alpha and M=2.2 Exhaust Plumes 01T3B6	B	Plume and Rudder Deflection	IV/155-157
Effects of M=2.2 Exhaust Plumes on Rudder Effectiveness with Beta at Alpha = 0 of 01T3B6	C	Plume and Rudder Deflection	IV/158-161
Longitudinal Effect of M=1.5 Exhaust Plumes on Configuration 01T4B7A1-4 at Beta = 0	A	Plume	IV/162-171



TABLE 6. (CONTINUED)

TITLE	PLOTTED		VOLUME/ PAGE NO.
	COEFFICIENTS	CONDITIONS VARYING	
Longitudinal Effect of M=2.2 Exhaust Plumes on Configuration 01T <sub>4</sub> B7A1-4 at Beta = 0	A	Plume	IV/172-181
Lateral-Directional Effects of M=1.5 Exhaust Plumes on Configuration 01T <sub>4</sub> B7A1-4 at Alpha = 0	C	Plume	IV/182-185
Lateral-Directional Effects of M=2.2 Exhaust Plumes on Configuration 01T <sub>4</sub> B7A1-4 at Alpha = 0	C	Plume	IV/186-189
Aileron Effectiveness of Configuration 01T <sub>4</sub> B7A1-4+Plume(1.5) at Beta = 0	B	Aileron Deflection	IV/190-192
Aileron Effectiveness of Configuration 01T <sub>4</sub> B7A1-4+Plume(2.2) at Beta = 0	B	Aileron Deflection	IV/193-195
Effects of Beta on Aileron Control of Configuration 01T <sub>4</sub> B7A1-4+Plume(1.5) at Alpha = 0	C	Aileron Deflection	IV/196-199
Effects of Beta on Aileron Control of Configuration 01T <sub>4</sub> B7A1-4+Plume(2.2) at Alpha = 0	C	Aileron Deflection	IV/200-203
Rudder Effectiveness of Configuration 01T <sub>4</sub> B7A1-4+Plume(1.5) at Alpha = 0	C	Rudder Deflection	IV/204-207
Rudder Effectiveness of Configuration 01T <sub>4</sub> B7A1-4+Plume(2.2) at Alpha = 0	C	Rudder Deflection	IV/208-211
Effects of Alpha on Rudder Control of Configuration 01T <sub>4</sub> B7A1-4+Plume(1.5) at Beta = 0	B	Rudder Deflection	IV/212-214
Effects of Alpha on Rudder Control of Configuration 01T <sub>4</sub> B7A1-4+Plume(2.2) at Beta = 0	B	Rudder Deflection	IV/215-217

TABLE 6. (CONTINUED)

TITLE	PICTURED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Longitudinal Effects of M=1.5 Exhaust Plumes on Configuration O1V1T4B7A1-4 at Beta = 0	A	Plume	IV/218-227
Lateral-Directional Effects of M=1.5 Exhaust Plumes on Configuration O1V1T4B7A1-4 at Alpha = 0	C	Plume	IV/228-231
Longitudinal Effects of M=2.2 Exhaust Plumes on Configuration O1V1T4B7A1-4 at Beta = 0	A	Plume	IV/232-241
Lateral-Directional Effects of M=2.2 Exhaust Plumes on Configuration O1V1T4B7A1-4 at Alpha = 0	C	Plume	IV/242-245
Effects of M=1.5 Exhaust Plumes on Rudder Effectiveness with and without Rudder Flare	C	Plume, Rudder Deflection, Rudder Flare	IV/246-253
Effects of M=2.2 Exhaust Plumes on Rudder Effectiveness with and without Rudder Flare	C	Plume, Rudder Deflection, Rudder Flare	IV/254-261
Variation of Rudder Control with and without Rudder Flare and M=1.5 Exhaust Plume	A	Plume, Rudder Deflection, Rudder Flare	IV/262-281
Variation of Rudder Control with and without Rudder Flare and M=2.2 Exhaust Plume	A	Plume, Rudder Deflection, Rudder Flare	IV/282-301
Effects of Beta = 6 on Longitudinal Characteristics of Configuration (O1)T1	A	Beta	IV/302-321
Effects of Beta = 6 on Lateral-Directional Characteristics of Configuration (O1)T1	B	Beta	IV/322-327
Lateral-Directional Characteristics of V1 and V2 on (O1)T1 at Alpha = 0	D	Configuration	IV/328-336
Longitudinal Characteristics Comparison of V1 and V2 on (O1)T1 at Alpha = 0	E	Configuration	IV/337-351

TABLE 6. (CONTINUED)

TITLE	PLOTTED		CONDITIONS VARYING	VOLUME/ PAGE NO.
	COEFFICIENTS	SCHEDULE		
Aileron Effectiveness of Configuration (01V1)T1 at Beta = 0	B		Aileron Deflection	IV/352-360
Effects of Beta on Aileron Effectiveness of Configuration (01V1)T1 at Alpha = 0	D		Aileron Deflection	IV/361-369
Longitudinal Characteristics of (01V1)T1 with Ailerons=20 at Beta = 0	A		Mach No.	IV/370-379
Lateral-Directional Characteristics of (01V1)T1 with Ailerons = 20 at Beta = 0	B		Mach No.	IV/380-382
Lateral-Directional Characteristics of (01V1)T1 with Ailerons = 20 at Alpha = 0	D		Mach No.	IV/383-385
Longitudinal Characteristics of (01V1)T1 with Ailerons=20 at Alpha = 0	E		Mach No.	IV/386-390
Rudder Effectiveness of Configuration (01V1)T1 at Alpha = 0	C		Rudder Deflection	IV/391-402
Effects of Alpha on Rudder Effectiveness of Configuration (01V1)T1 at Beta = 0	B		Rudder Deflection	IV/403-411
Effect of Tank T2 Longitudinal Position on (01)T2 at Beta=0	A		Configuration	IV/412-431
Effect of Tank T2 Longitudinal Position on (01)T2 with Beta at Alpha = 0	C		Configuration	IV/432-439
Longitudinal Characteristics of Various Boosters on Configuration (01)T2 at Beta = 6	A		Configuration	IV/440-449
Lateral-Directional Characteristics of Various Boosters on Configuration (01)T2 at Beta = 6	B		Configuration	IV/450-452

TABLE 6. (CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Effects of Beta = 6 on Longitudinal Characteristics of Configuration (01)T <sub>3</sub>	A	Beta	IV/453-472
Effects of Beta = 6 on Lateral-Directional Characteristics of Configuration (01)T <sub>3</sub>	B	Beta	IV/473-478
Effects of Beta on Longitudinal Characteristics of (01)T <sub>4</sub>	A	Beta	IV/479-488
Effects of Beta on Lateral-Directional Characteristics of (01)T <sub>4</sub>	B	Beta	IV/489-491
Longitudinal Characteristics of Configuration T1B5 at Beta = 0	A	Mach No.	IV/492-501
Lateral-Directional Characteristics of Configuration T1B5 at Alpha = 0	C	Mach No.	IV/502-505
Longitudinal Characteristics of Configuration T1B6 at Beta = 0	A	Mach No.	IV/506-515
Lateral-Directional Characteristics of Configuration T1B6 at Alpha = 0	C	Mach No.	IV/516-519
Longitudinal Characteristics of Configuration T3B2 at Beta = 0	A	Mach No.	IV/520-529
Lateral-Directional Characteristics of Configuration T3B2 at Alpha = 0	C	Mach No.	IV/530-533
Longitudinal Characteristics of Configuration T3B5 at Beta = 0	A	Mach No.	IV/534-543
Lateral-Directional Characteristics of Configuration T3B5 at Alpha = 0	C	Mach No.	IV/544-547

TABLE 6. (CONTINUED)

TITLE	PLOTTED		CONDITIONS VARYING	VOLUME/ PAGE NO.
	COEFFICIENTS	SCHEDULE		
Effects of Beta on Longitudinal Characteristics of 01	A	Beta		V/1-60
Effects of Beta on Lateral-Directional Characteristics of 01	B	Beta		V/61-78
Effects of Alpha on Rudder Effectiveness of Configuration 01 at Beta = 0	B	Rudder Deflection		V/79-90
Effects of Alpha on Rudder Effectiveness of Configuration 01V1	B	Rudder Deflection		V/91-93
Effects of Beta on Longitudinal Characteristics of 01V1	A	Beta		V/94-123
Effects of Beta on Lateral-Directional Characteristics of 01V1	B	Beta		V/124-132
Effects of Beta on Longitudinal Characteristics V Off	A	Beta		V/133-162
Effects of Beta on Lateral-Directional Characteristics of 01 V Off	B	Beta		V/163-171
Effects of Beta on Lateral-Directional Characteristics of 01C1	B	Beta		V/172-186
Effects of Beta on Lateral-Directional Characteristics of 01C1	B	Beta		V/187-201
Longitudinal Characteristics of Various Tanks at Beta = 0	A	Configuration		V/202-261
Longitudinal Characteristics of Various Boosters Alone at Beta = 0 and Nominal MRC	A	Configuration		V/262-301

TABLE 6. (CONTINUED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	VOLUME/ PAGE NO.
Longitudinal Characteristics of Various Boosters Alone at Beta = 0 and Tank 1 MRC	A	Configuration	V/302-341
Longitudinal Characteristics of Various Boosters Alone at Beta = 0 and Tank 3 MRC	A	Configuration	V/342-381
Lateral-Directional Characteristics of Various Boosters Alone at Beta = 0 and Tank 1 MRC	B	Configuration	V/382-393
Lateral-Directional Characteristics of Various Boosters Alone at Beta = 0 and Tank 3 MRC	B	Configuration	V/394-405
Lateral-Directional Characteristics of Various Boosters Alone at Alpha = 0 and Nominal MRC	C	Configuration	V/406-421
Lateral-Directional Characteristics of Various Boosters Alone at Alpha = 0 and Tank 1 MRC	C	Configuration	V/422-437
Lateral-Directional Characteristics of Various Boosters Alone at Alpha = 0 and Tank 3 MRC	C	Configuration	V/438-453
Comparison of Longitudinal Characteristics of Booster Bl with Larger Aft Flares S	A	Configuration	V/454-523
Comparison of Longitudinal Characteristics of Booster Bl with Flaps D2 at Various Deflection	A	Flap Deflection	V/524-583
Comparison of Longitudinal Characteristics of Booster Bl with Various Flaps	A	Flap Deflection	V/584-643

TABLE 6. (CONCLUDED)

PLOTTED COEFFICIENTS SCHEDULE:

(A) - CN, CA, CAF, CIM, CL & CDF vs. ALPHA

CN & CL vs. CIM, CL & CLSQR vs. CDF

(B) - CY, CYN & CBL vs. ALPHA

(C) - CY, CYN, CBL & CAF vs. BETA

(D) - CY, CYN, CBL vs. BETA

(E) - CN, CAF, CIM, CL & CDF vs. BETA

Notes:

1. Positive directions of force coefficients  
moment coefficients, and angles are  
indicated by arrows.

2. For clarity, origins of wind and stability  
axes have been displaced from the center  
of gravity.

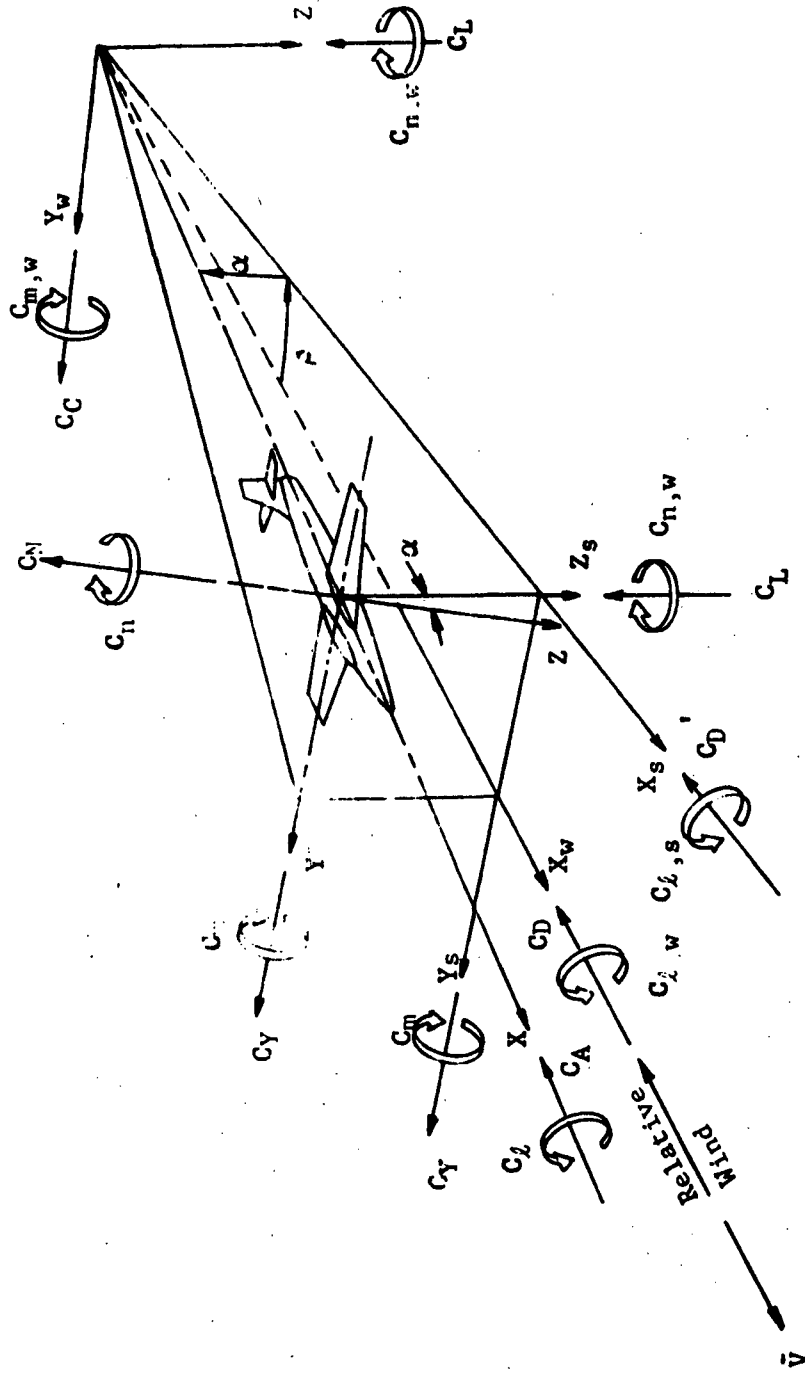


Figure 1. Axis systems, showing direction and sense of force and moment coefficients, angle of attack, and sideslip angle



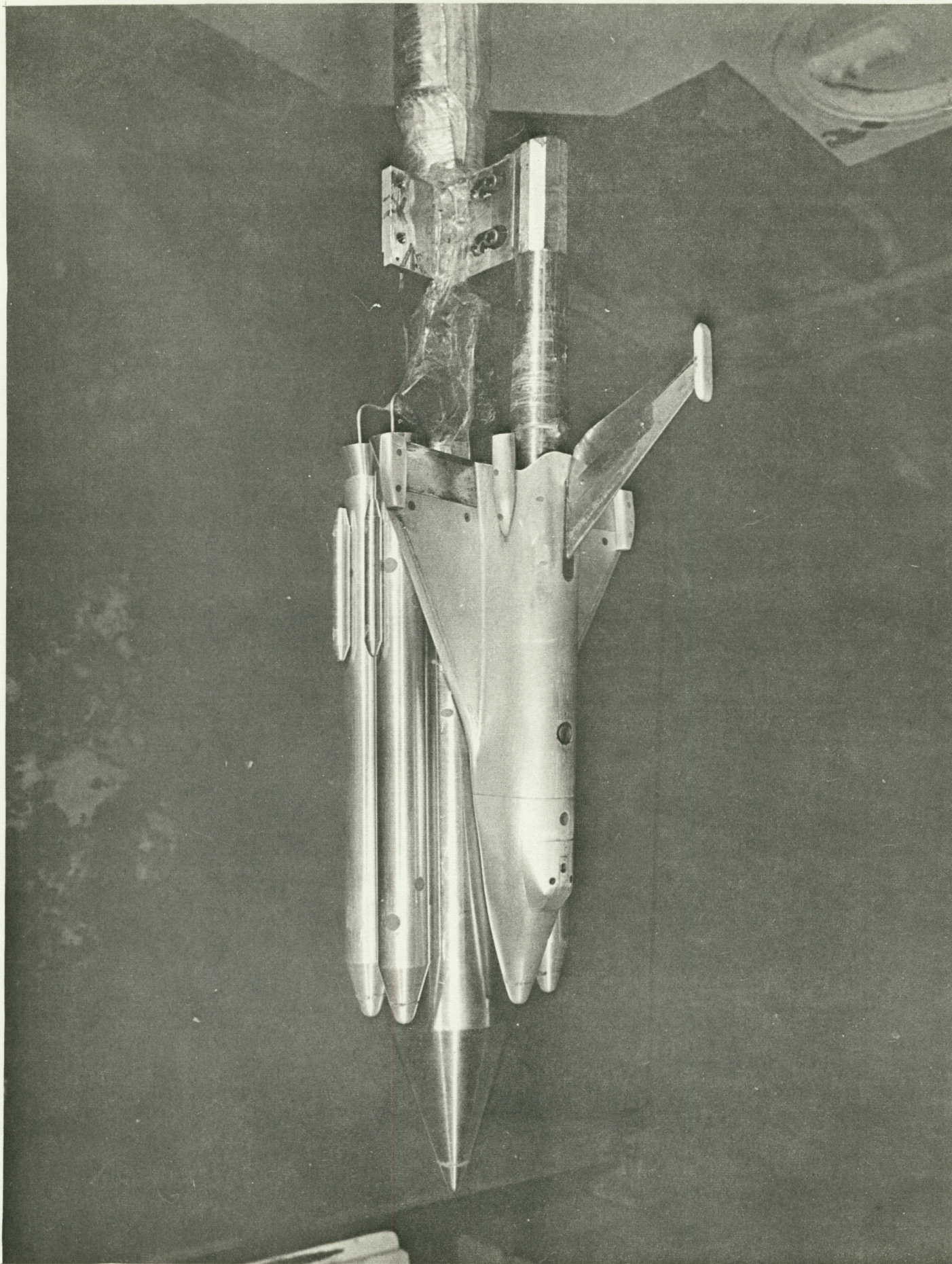
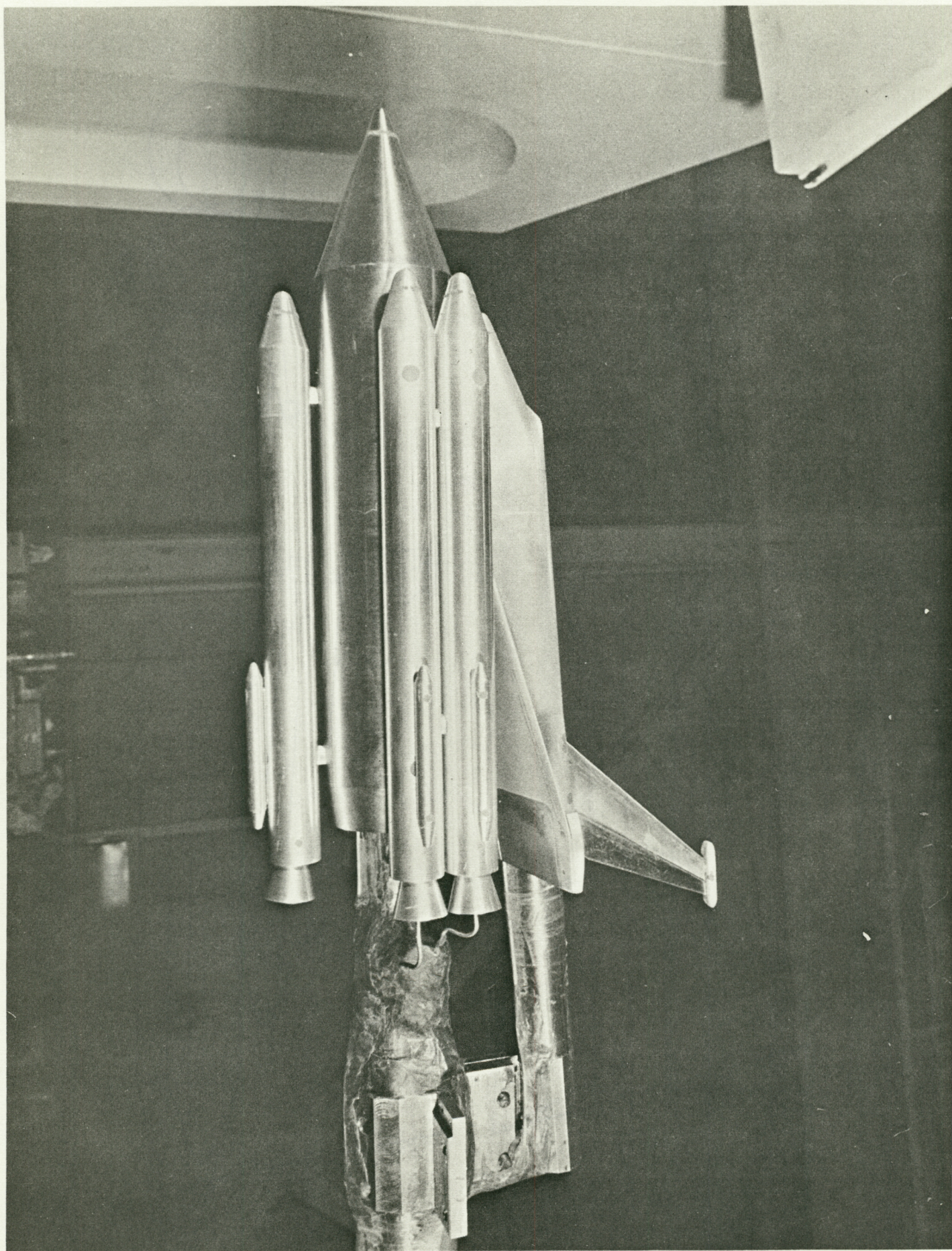


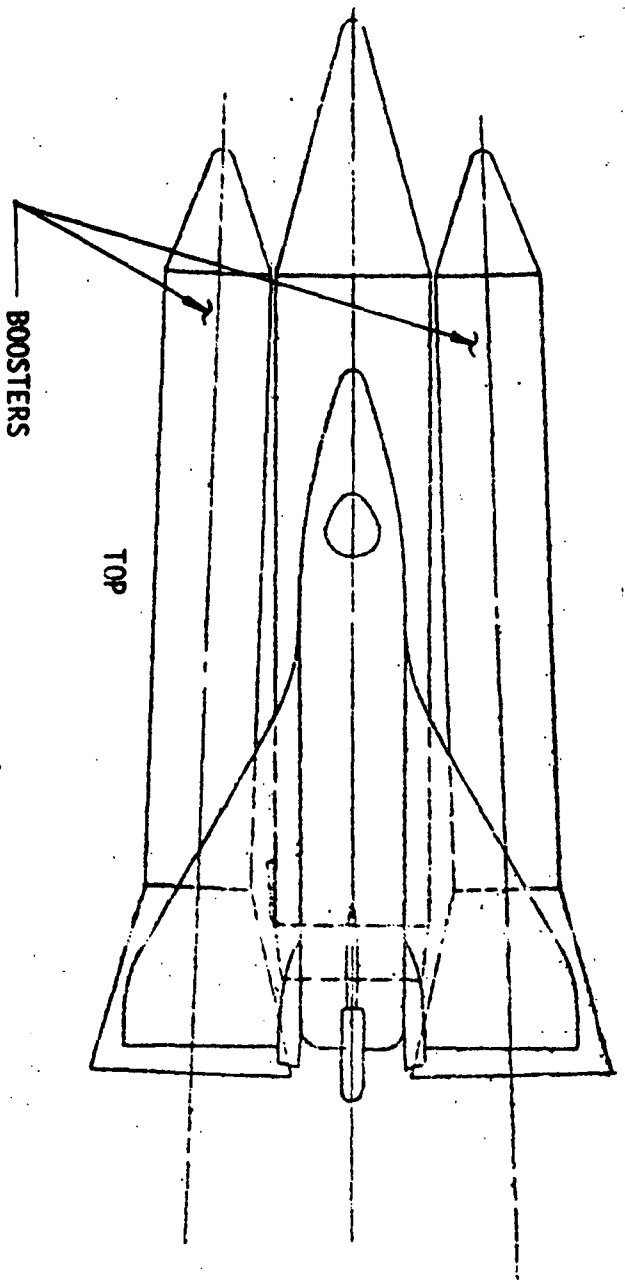
Figure 2. Photograph of Configuration (01) F4B7A1-4



Figure 3. Photograph of Configuration (01) TL4B7A1-5







ASCENT CONFIGURATION  
GENERAL ARRANGEMENT  
( $B_1, T_1, O_1$ )

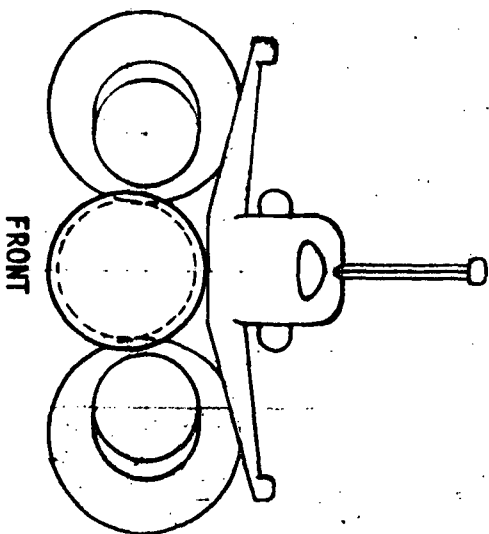
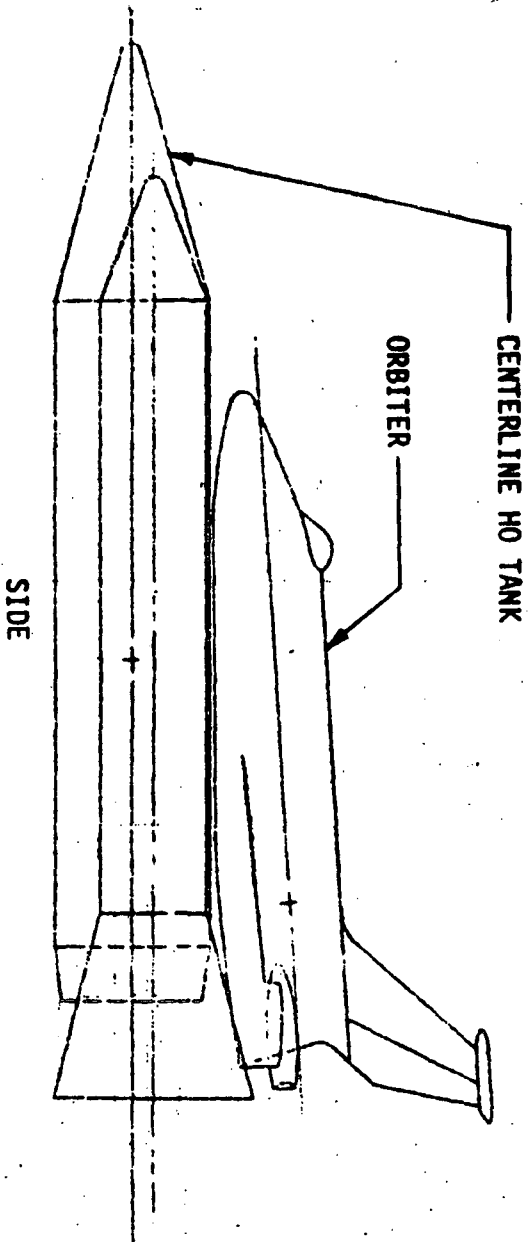
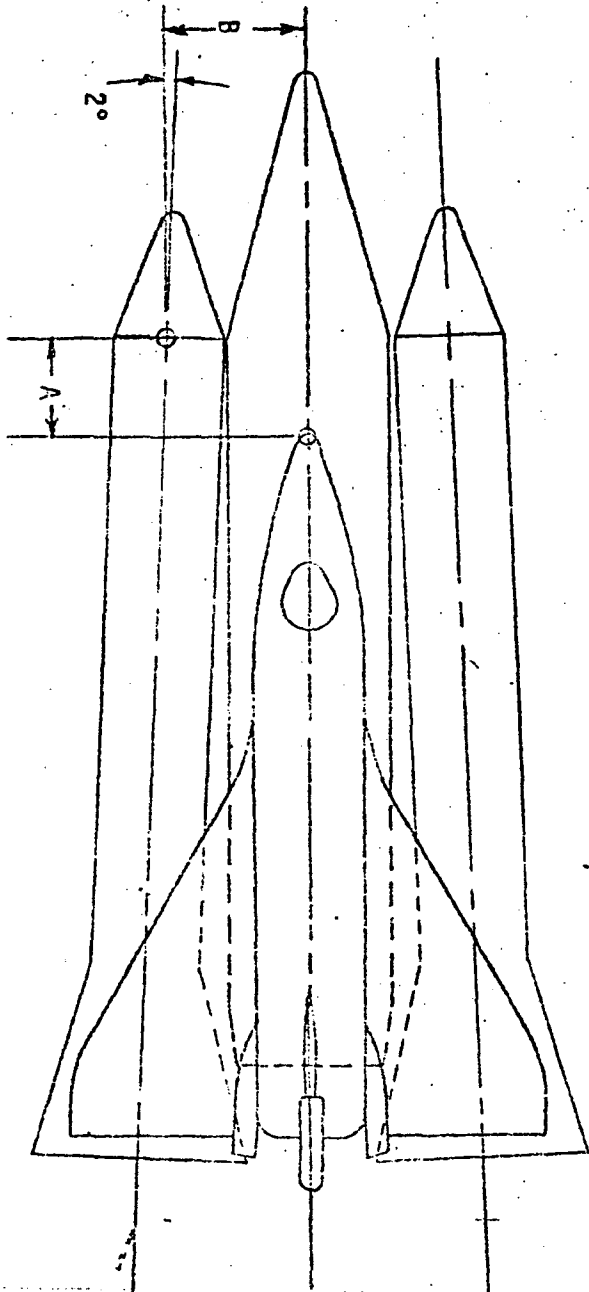


Figure 4. General Arrangement-Ascent Configuration  $O_1 T_1 B_1$

B<sub>1</sub> OR B<sub>5</sub> BOOSTER LOCATION



DIMENSION	TANK	
	T1 & T2	T3
A	1.080	1.360
B	1.560	1.628
C	1.282	1.340

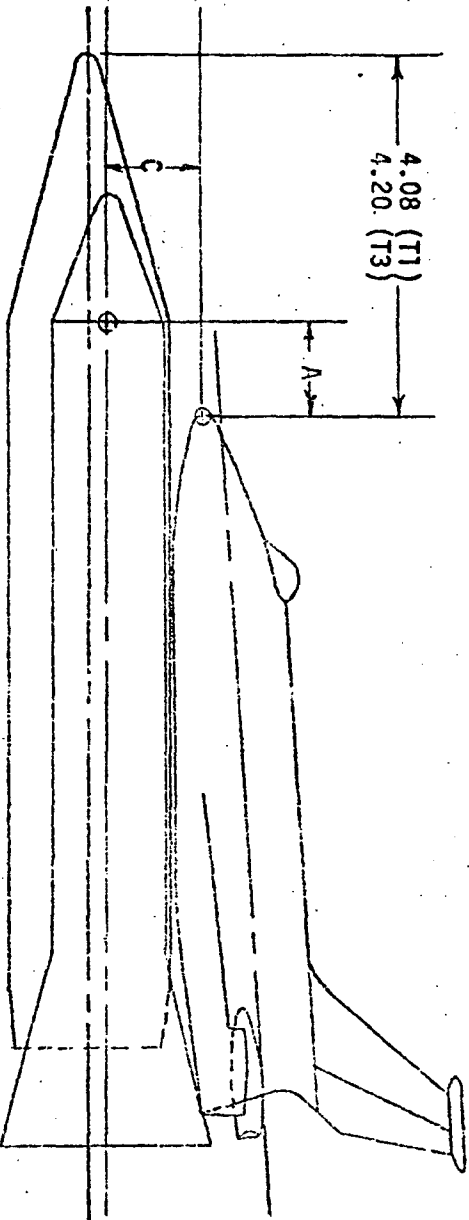
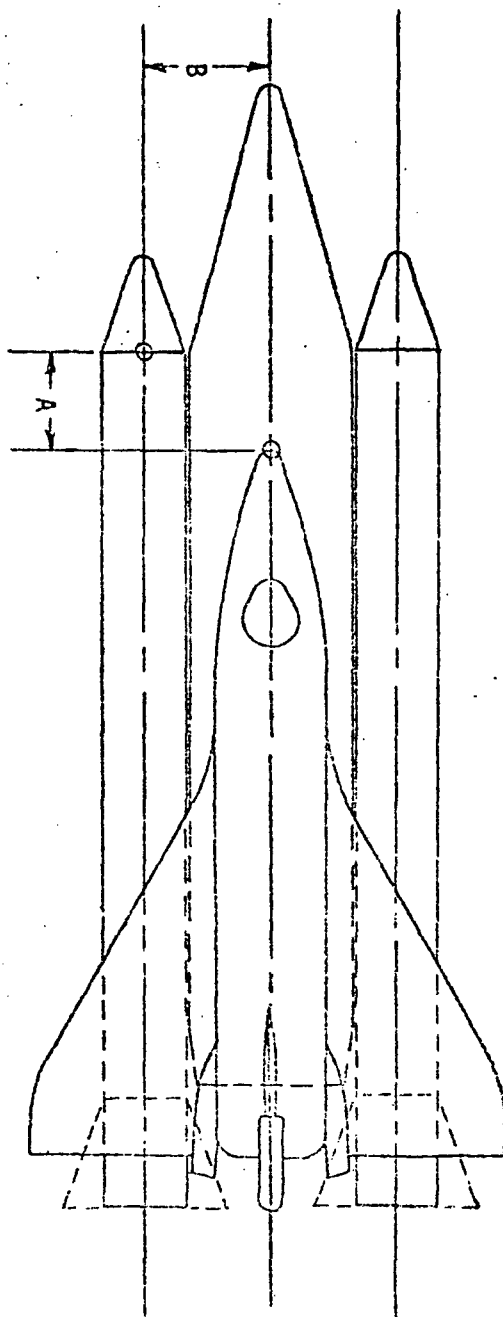


Figure 5. General Arrangement-Ascent Configuration  
With Booster B<sub>1</sub> or B<sub>5</sub>

# $B_2$ AND $B_2S$ BOOSTERS LOCATION



DIMENSION	TANK	
	T1 & T2	T3
A	1.080	-1.522
B	1.420	1.483
C	1.072	1.080

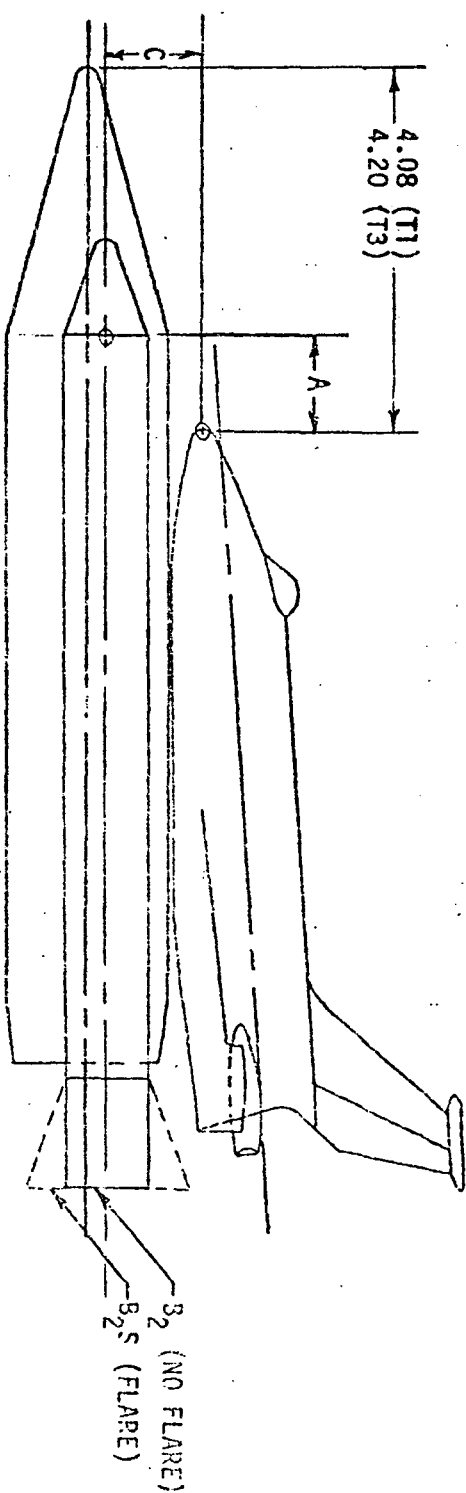
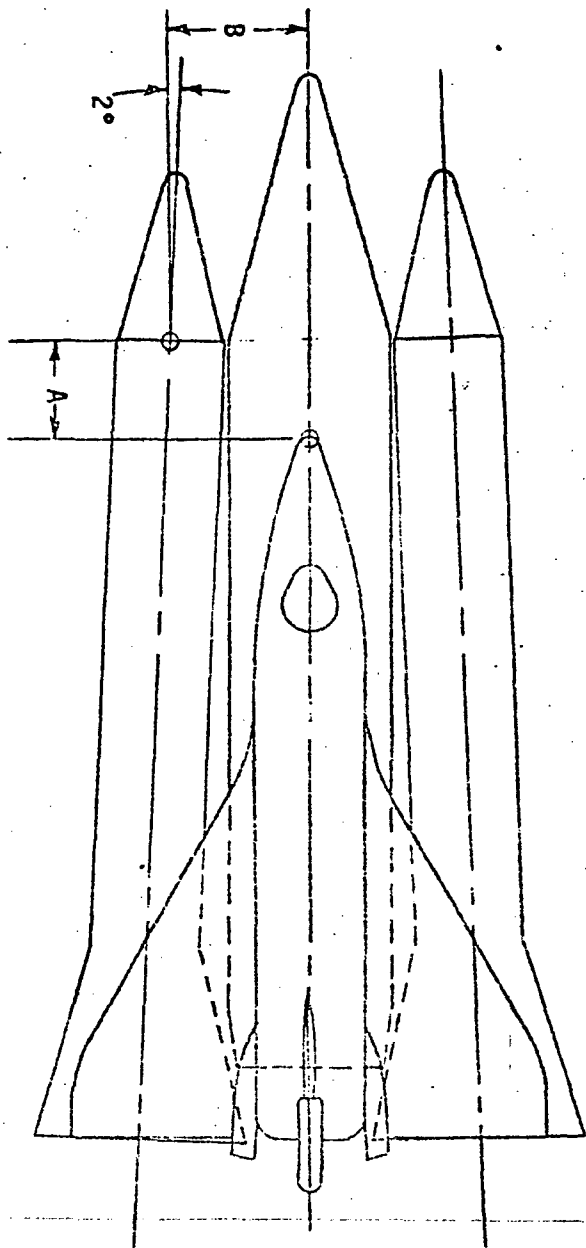


Figure 6. General Arrangement-Ascent Configuration with Booster  $B_2$  or  $B_2S$

# B<sub>3</sub> BOOSTER LOCATION



DIMENSION	TANK	
	T1 & T2	T3
A	0.682	0.962
B	1.560	1.628
C	1.282	1.340

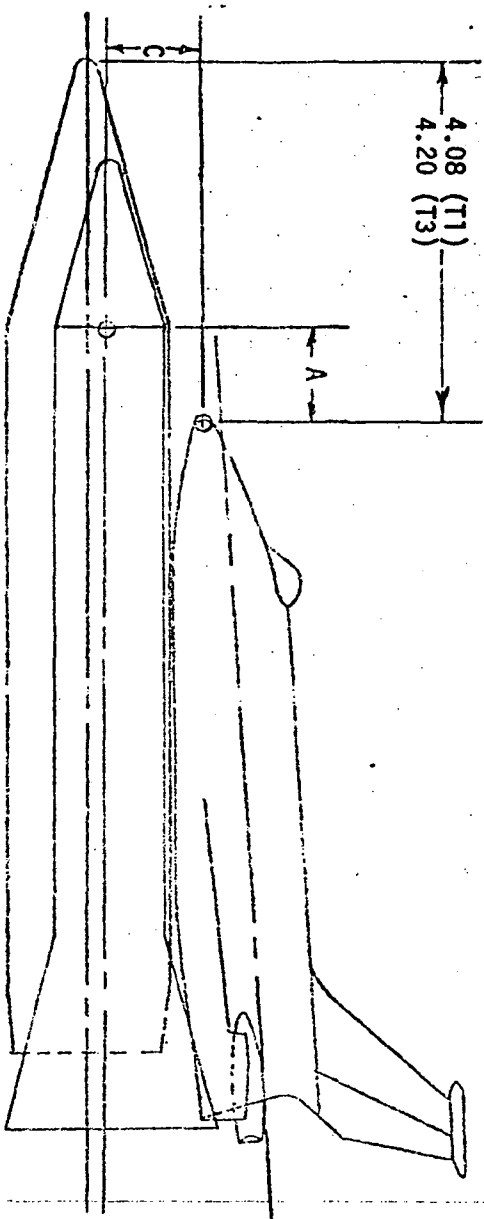
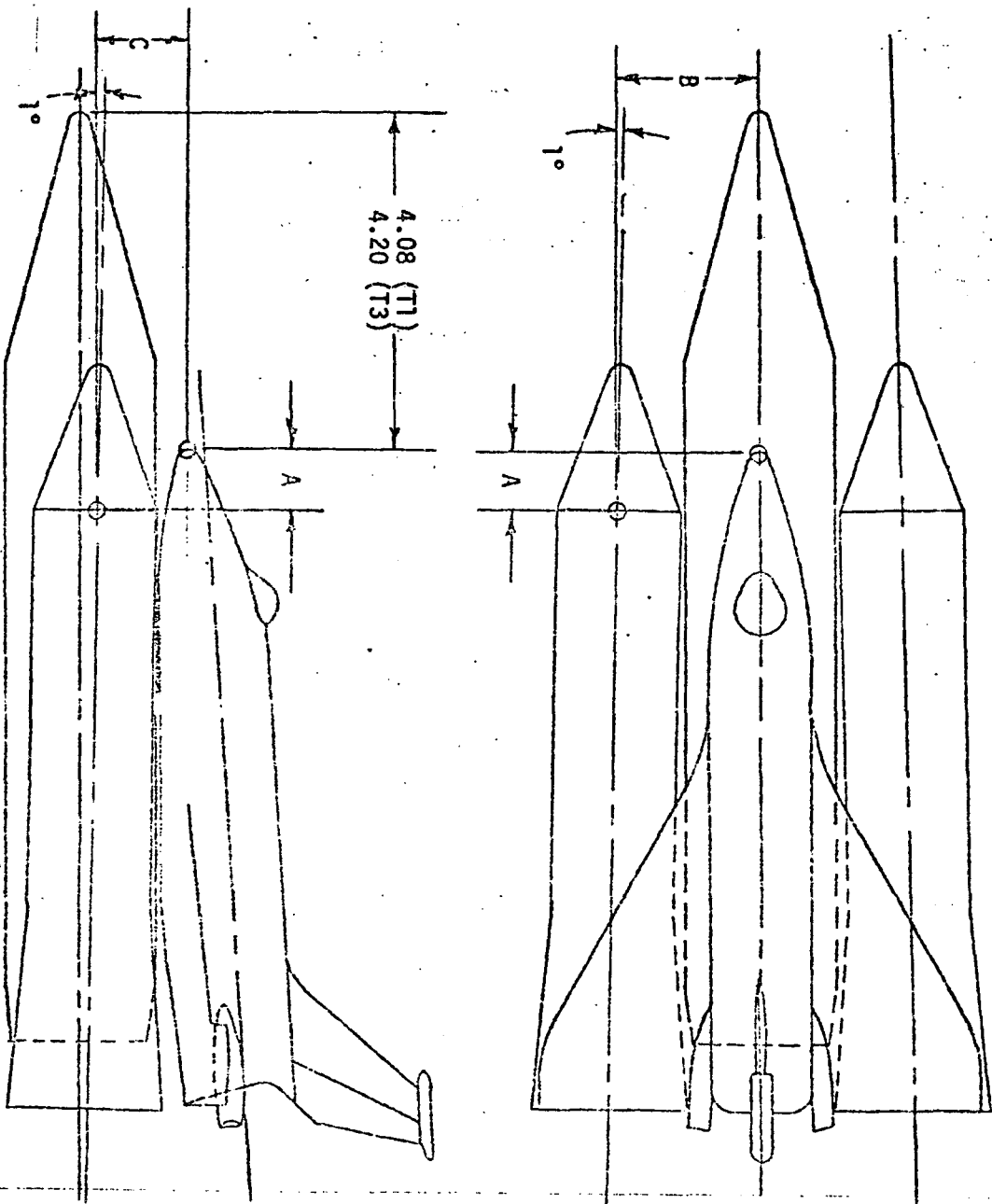


Figure 7. General Arrangement-Ascent Configuration with Booster B<sub>3</sub>

# B<sub>4</sub> BOOSTER LOCATION



DIMENSION	TANK	
	T1 & T2	T3
A	0.640	0.757
B	1.685	1.753
C	1.091	1.091

Figure 8. General Arrangement-Ascent Configuration with Booster B<sub>4</sub>

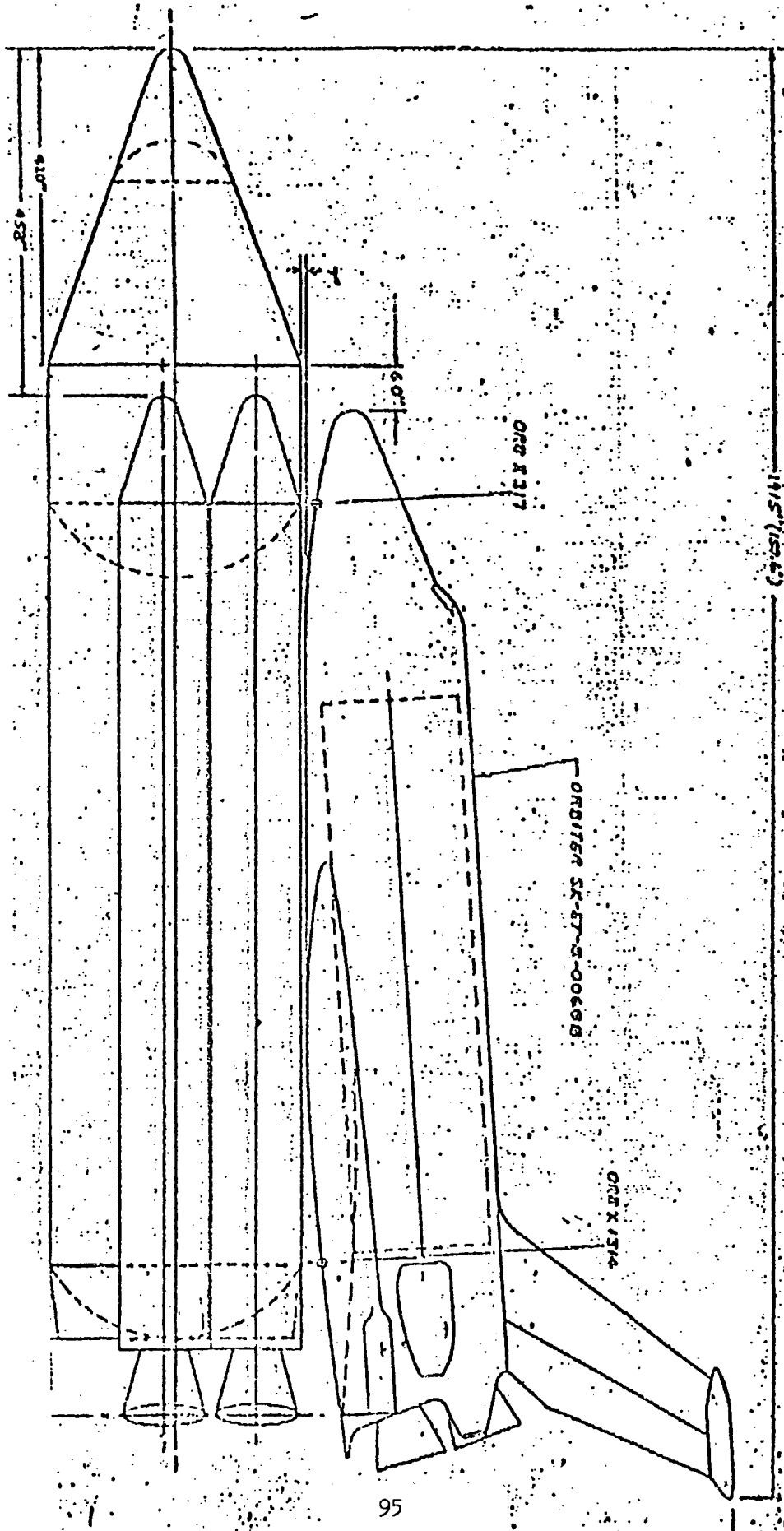


Figure 9. General Arrangement-Ascent Configuration  
OL14B7-4 (Side View)



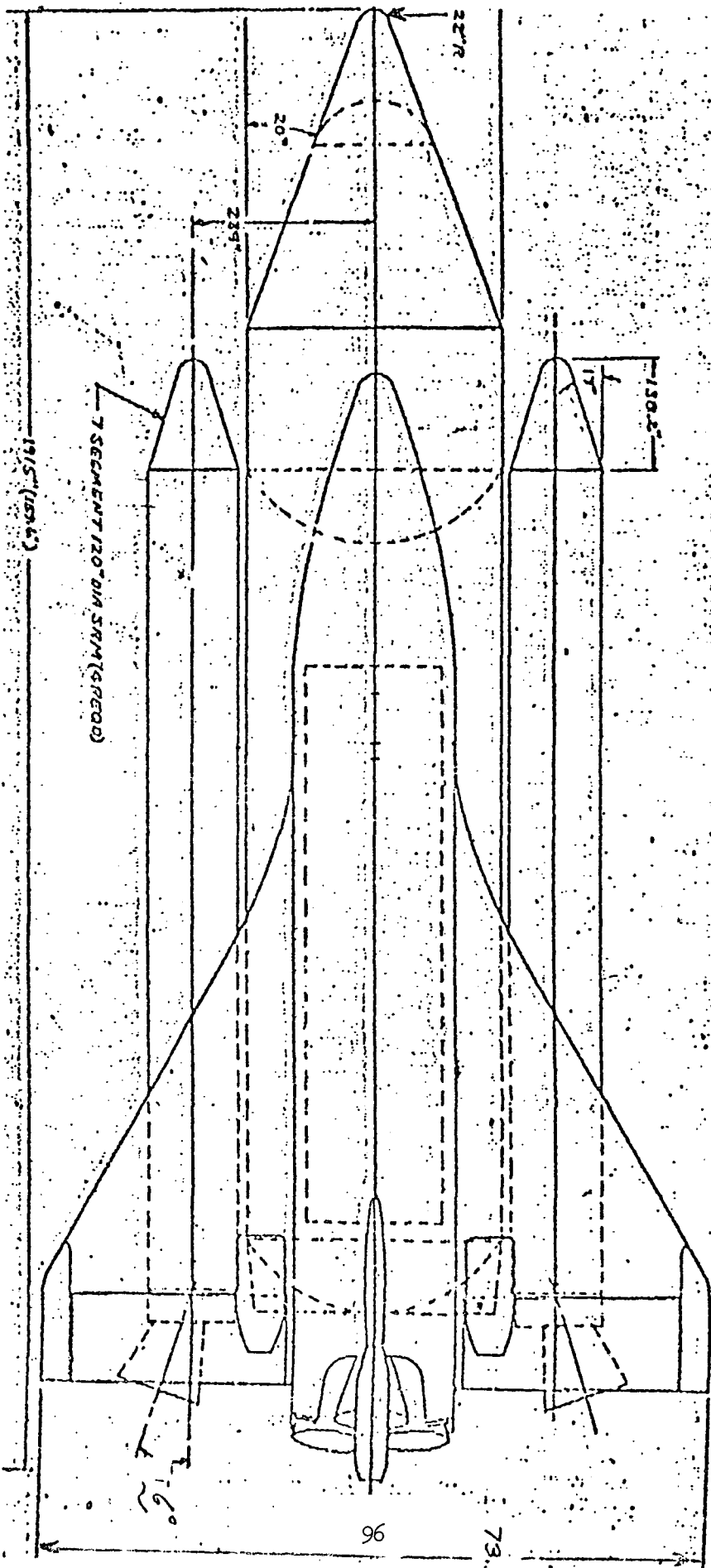
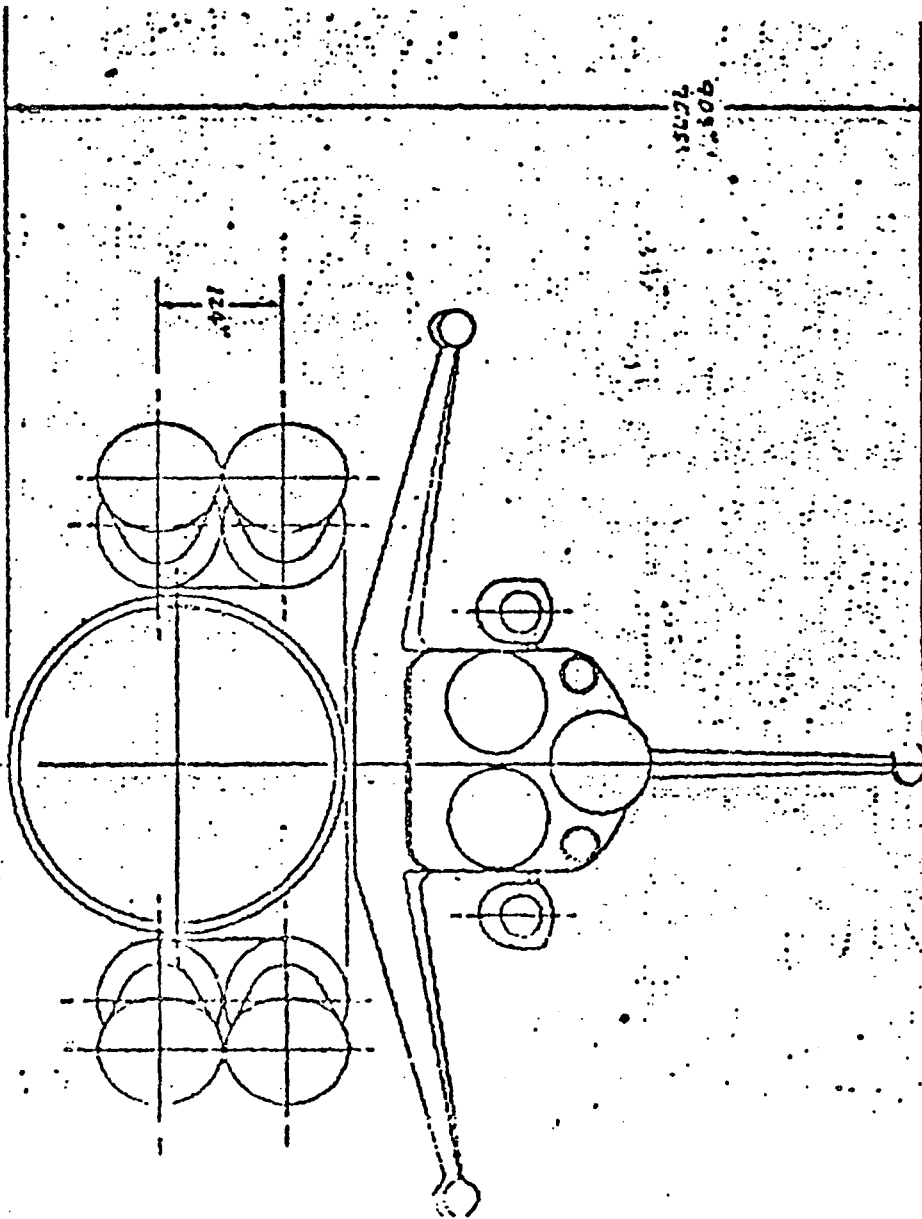


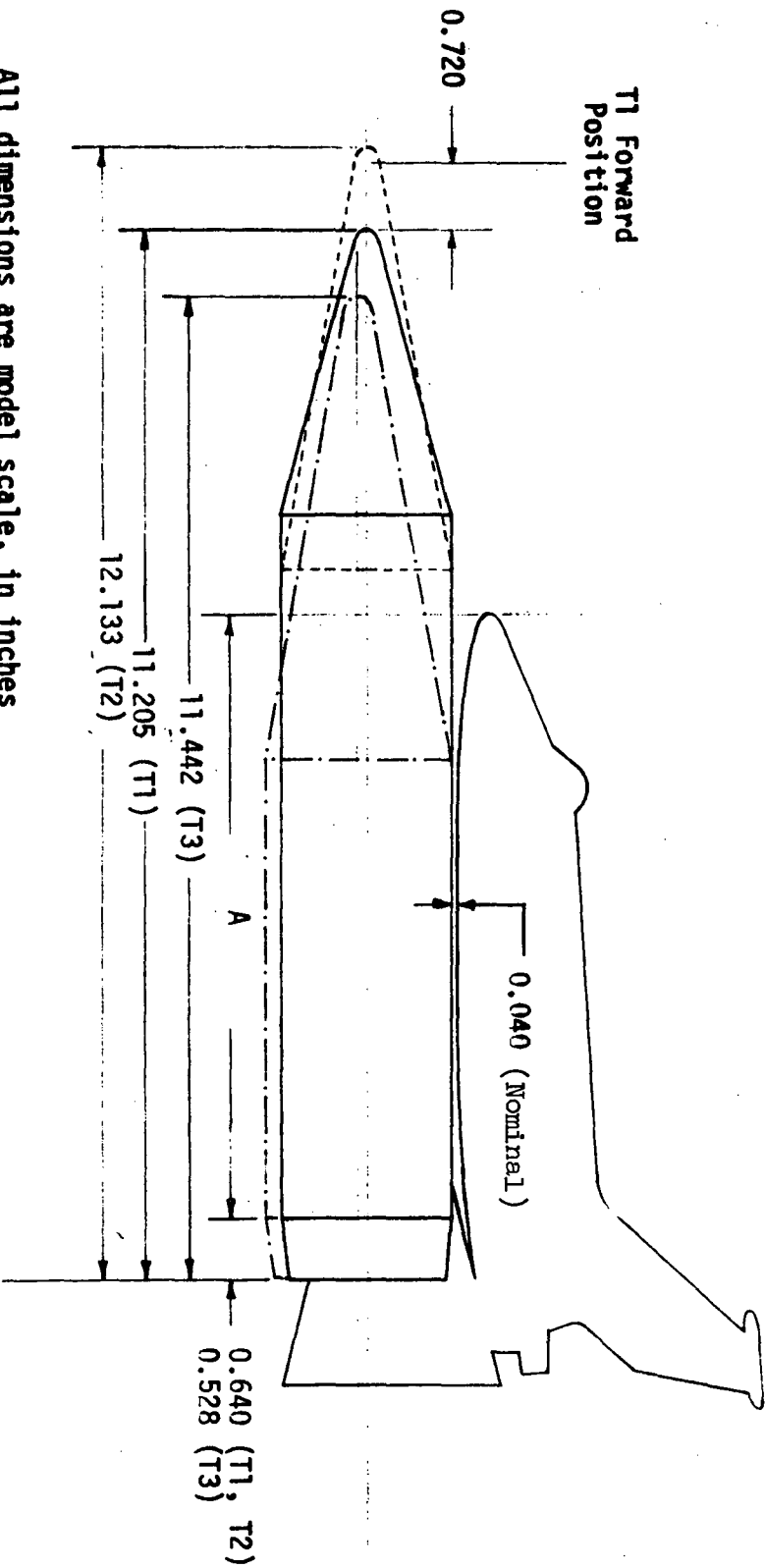
Figure 10. General Arrangement-Ascent Configuration  
OLF4B7-4 (Top View)

Figure 11. General Arrangement-Ascent Configuration 0174B7-4  
(Rear View)



# CENTERLINE HO TANK LOCATIONS

Orbiter Nose  
X (200)  
1.200

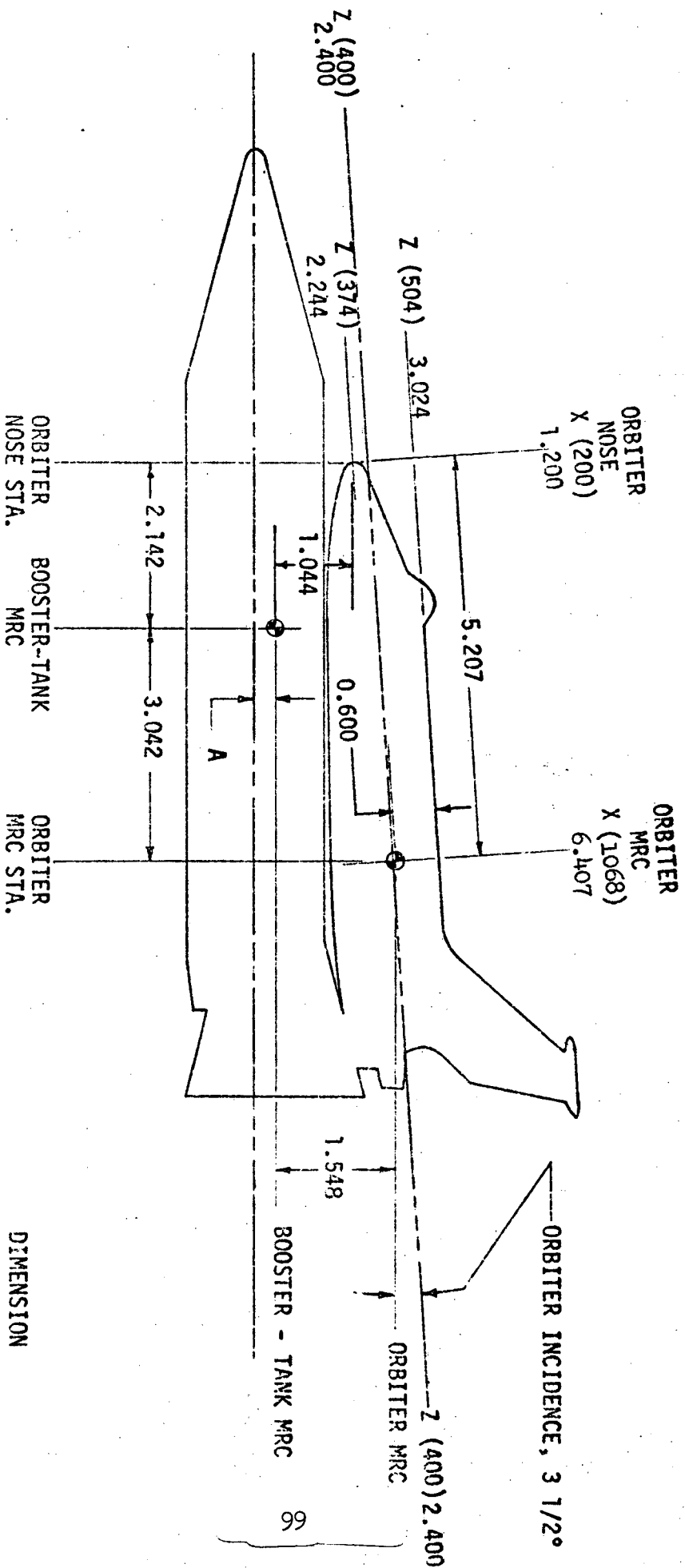


All dimensions are model scale, in inches.  
Orbiter stations are given in both full  
scale and model scale dimensions.

TANK	A
T1	6.485
T2	6.485
T3	6.714

Figure 12. Centerline HO Tank Locations

# MOMENT TRANSFER DIAGRAM ASCENT CONFIGURATION

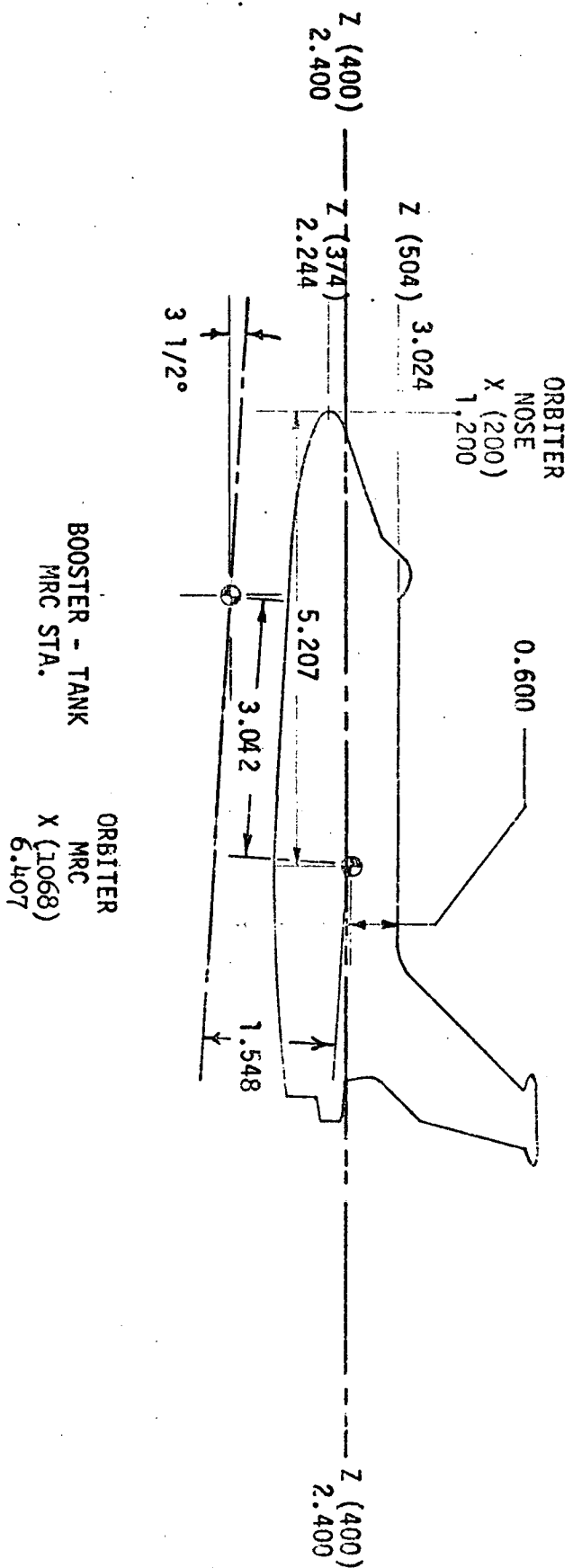


All dimensions are model scale, in inches  
Orbiter stations are given in both full  
scale and model scale dimensions.

DIMENSION	
TANK	A
T1	0.266
T2	0.288
T3	0.357

Figure 13. Moment Transfer Diagram for Ascent Configuration

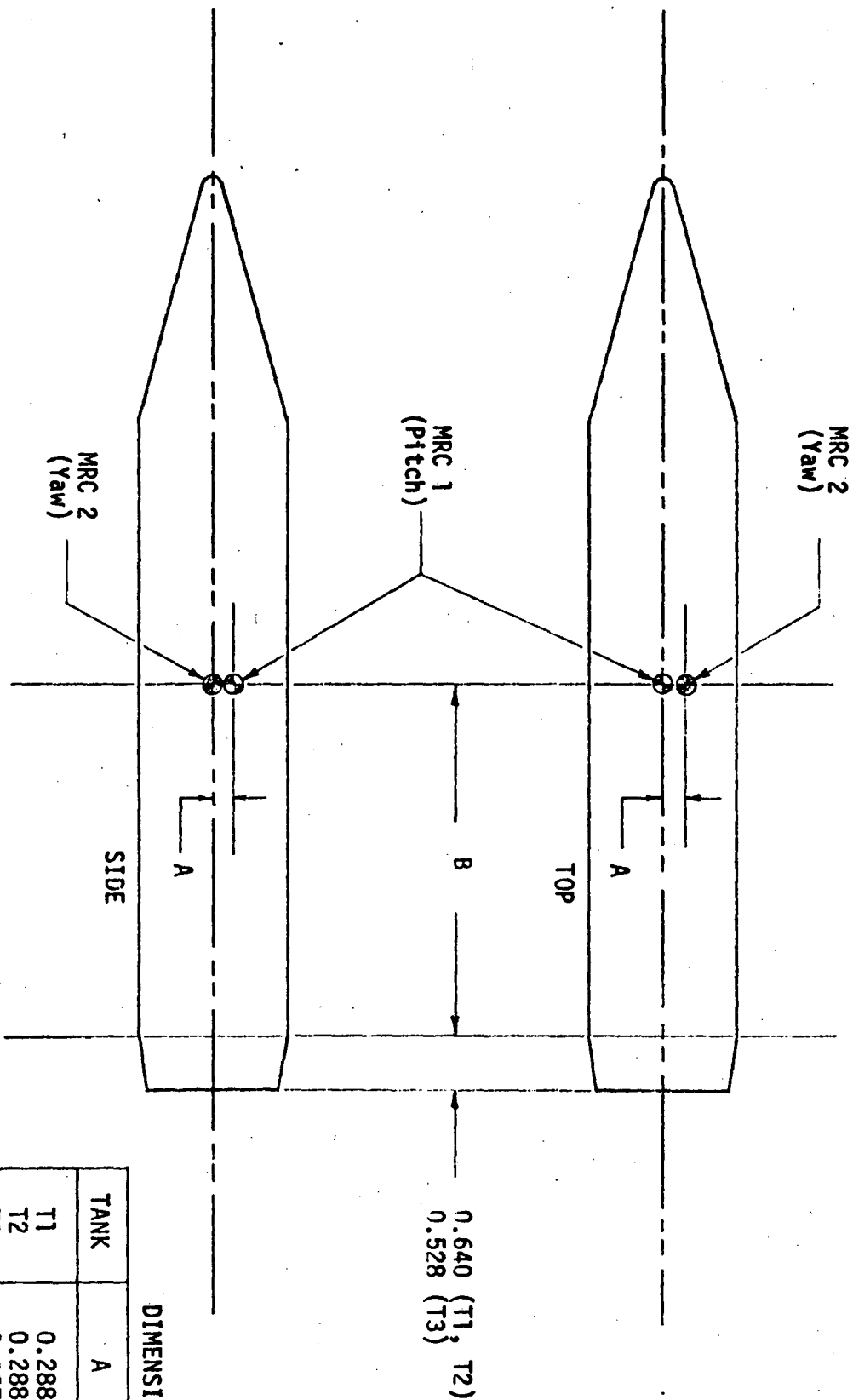
# MOMENT TRANSFER DIAGRAM ORBITER ALONE



All dimensions are model scale, in inches  
Orbiter stations are given in both full  
scale and model scale dimensions.

Figure 14. Moment Transfer Diagram for Orbiter Alone

# MOMENT TRANSFER DIAGRAM CENTERLINE TANK ALONE

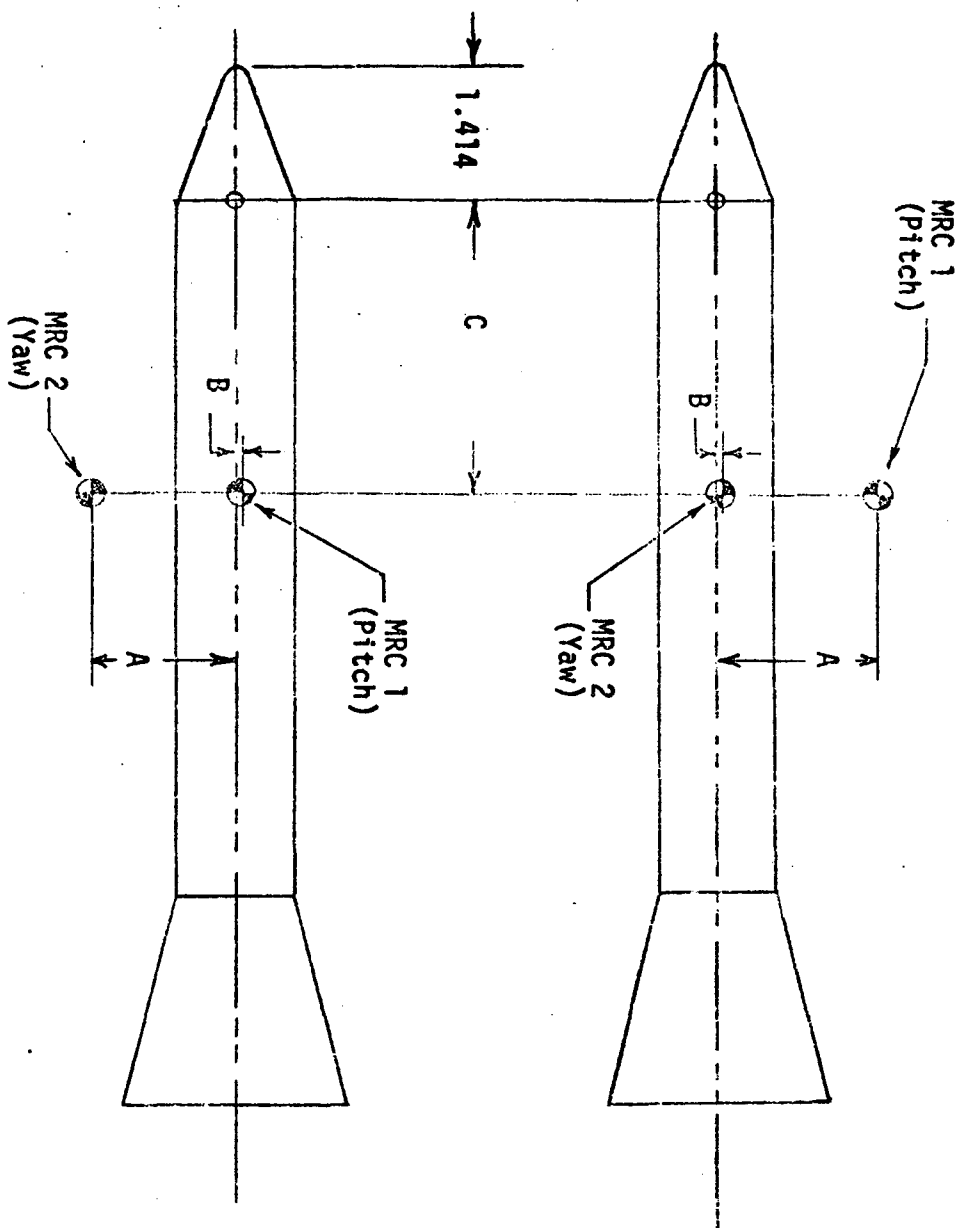


TANK	A	B
T1	0.288	4.243
T2	0.288	4.243
T3	0.357	4.572

All dimensions are model scale, in inches

Figure 15. Moment Transfer Diagram for Centerline Tank Alone

# MOMENT TRANSFER DIAGRAM B<sub>1</sub> Booster Alone



Dimension			
TANK	A	B	C
T <sub>1</sub>	1.664	0.238	3.222
T <sub>2</sub>	1.664	0.238	3.222
T <sub>3</sub>	1.732	0.297	3.502

## Booster Alone

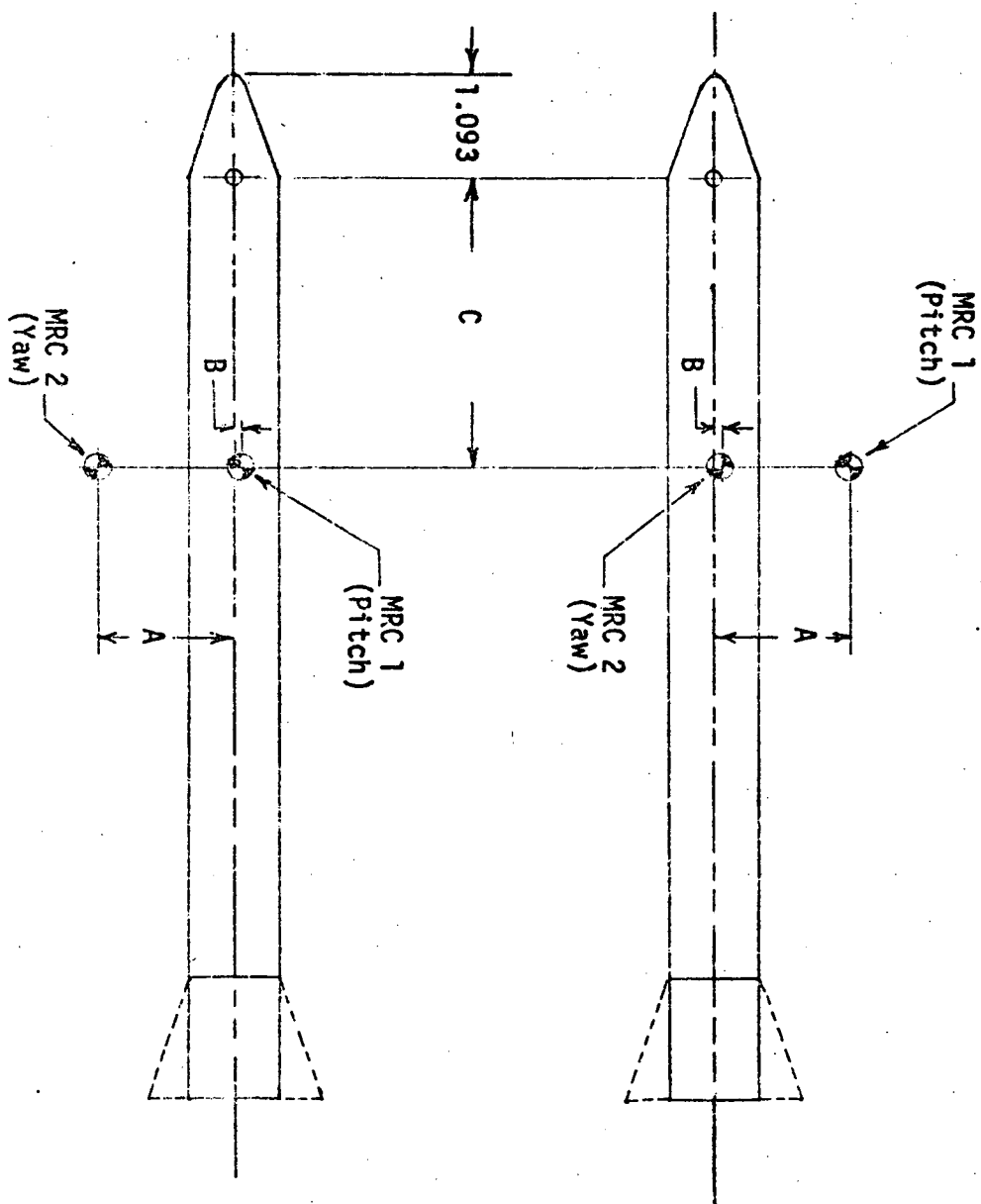
X = 4.386" From nose

Y = 0

Z = 0

Figure 16. Moment Transfer Diagram for B1 Booster Alone

# MOMENT TRANSFER DIAGRAM B<sub>2</sub> and B<sub>2</sub>S Boosters Alone



	DIMENSION		
TANK	A	B	C
T <sub>1</sub>	1.420	0.058	3.222
T <sub>2</sub>	1.420	0.058	3.222
T <sub>3</sub>	1.488	0.037	3.664

Booster Alone

X = 4.091" From nose

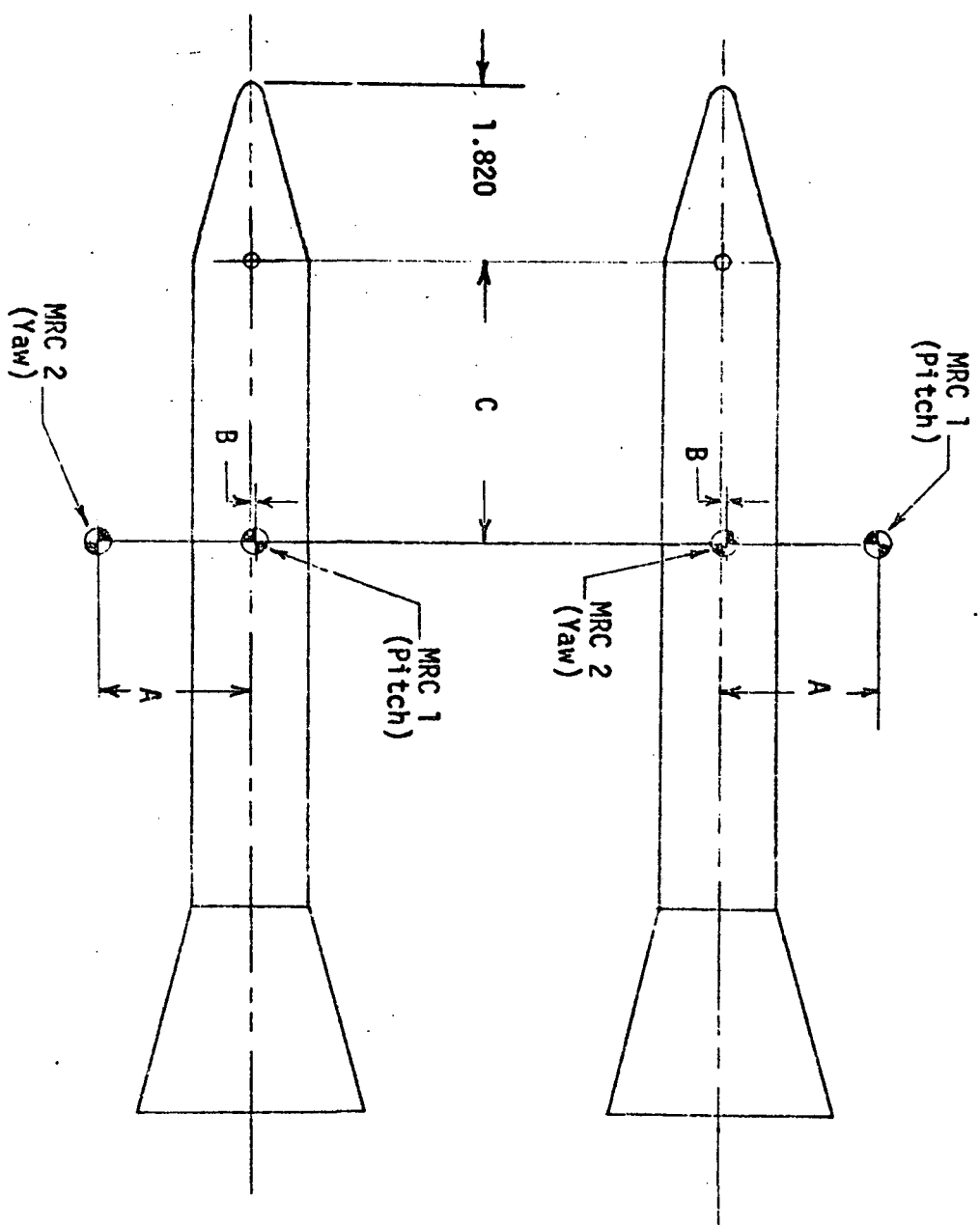
Y = 0

Z = 0

Figure 17. Moment Transfer Diagram for B<sub>2</sub> & B<sub>2</sub>S Boosters Alone



# MOMENT TRANSFER DIAGRAM B<sub>3</sub> Booster Alone

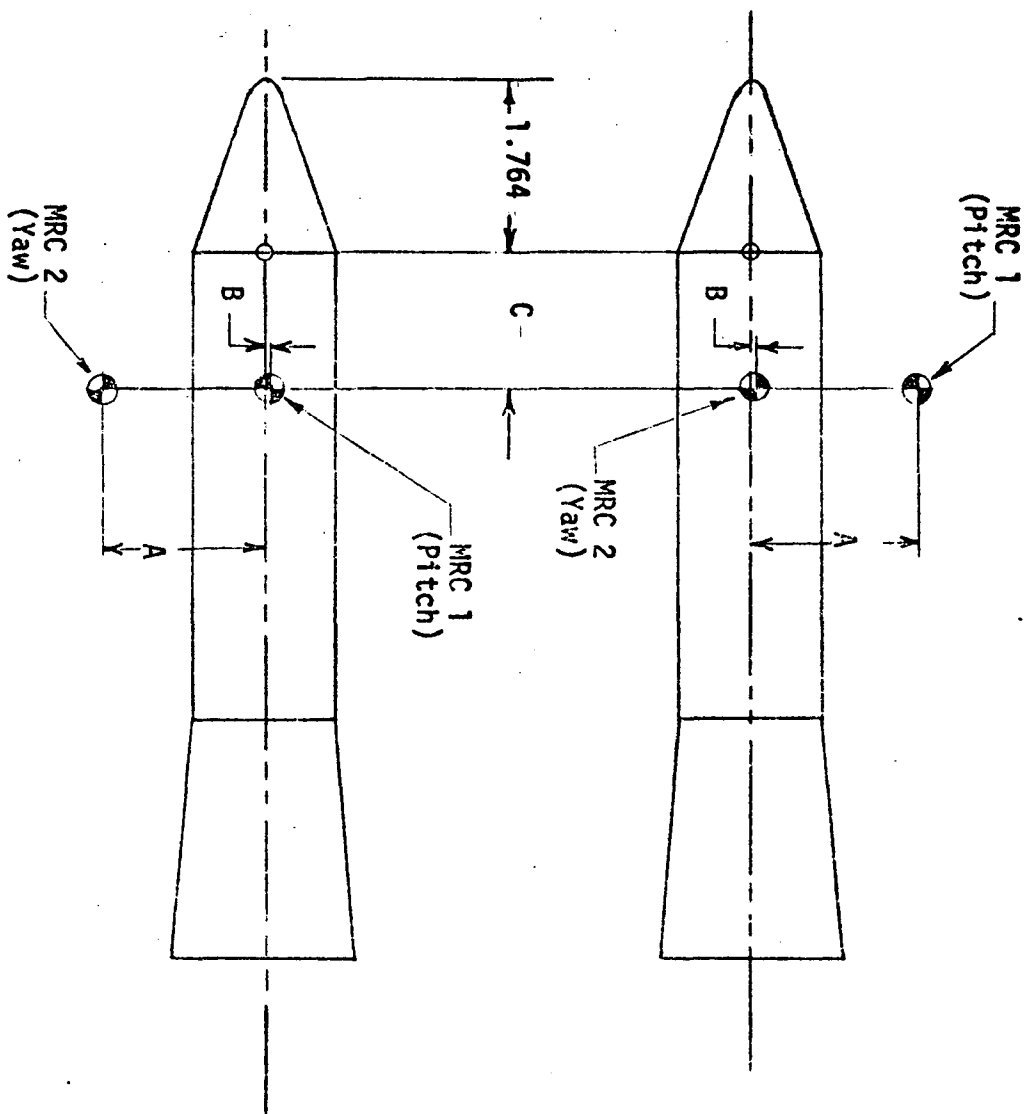


	DIMENSION		
TANK	A	B	C
T <sub>1</sub>	1.664	0.238	2.824
T <sub>2</sub>	1.664	0.238	2.824
T <sub>3</sub>	1.732	0.297	3.104

Booster Alone  
X = 4.386" From nose  
Y = 0  
Z = 0.

Figure 18. Moment Transfer Diagram for B<sub>3</sub> Booster Alone

# MOMENT TRANSFER DIAGRAM B<sub>4</sub> Booster Alone



	DIMENSION		
TANK	A	B	C
T <sub>1</sub>	1.709	0.047	1.502
T <sub>2</sub>	1.709	0.047	1.502
T <sub>3</sub>	1.774	0.047	1.385

Booster Alone

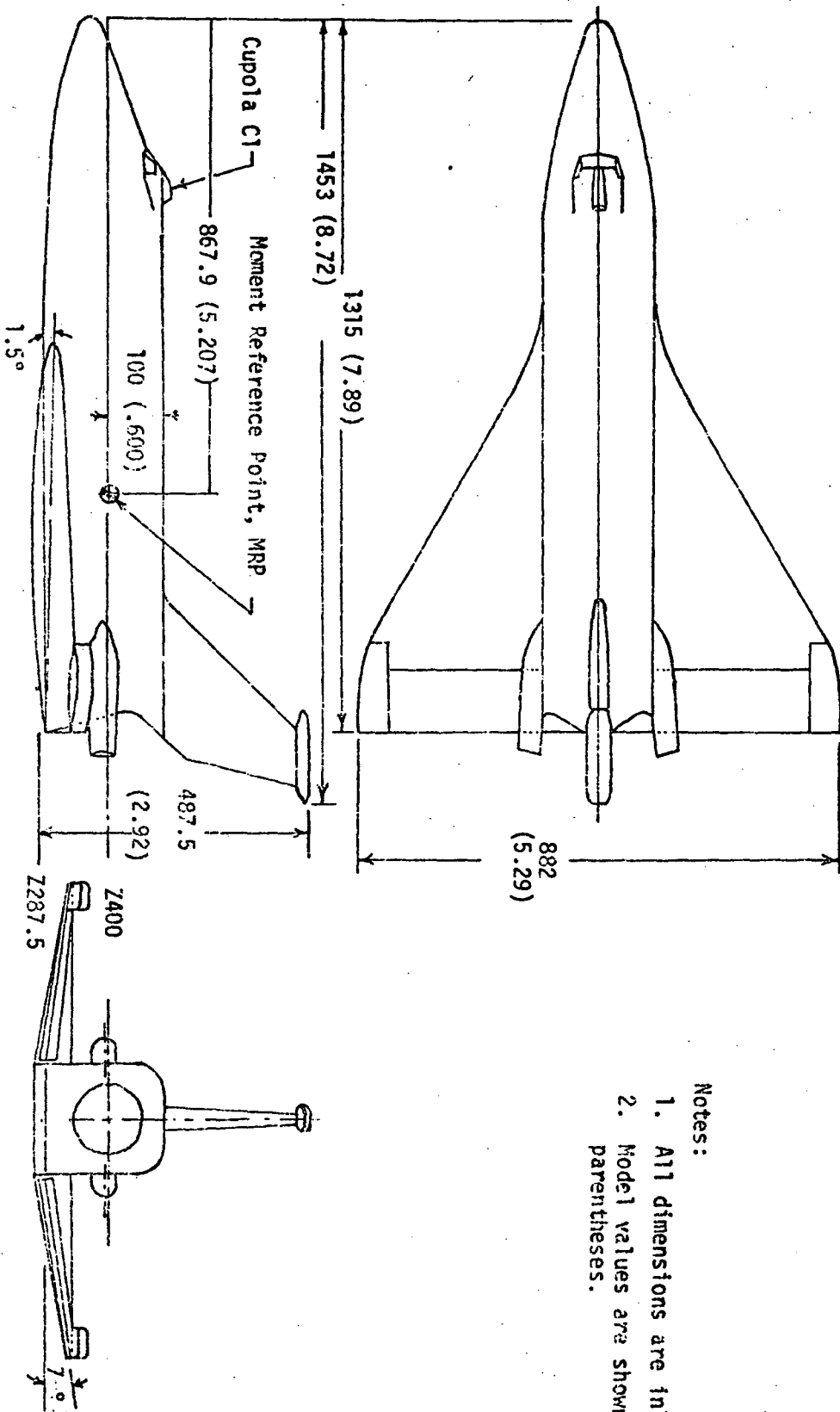
X = 3.152" From nose

Y = 0

Z = 0

Figure 19. Moment Transfer Diagram for B<sub>4</sub> Booster Alone

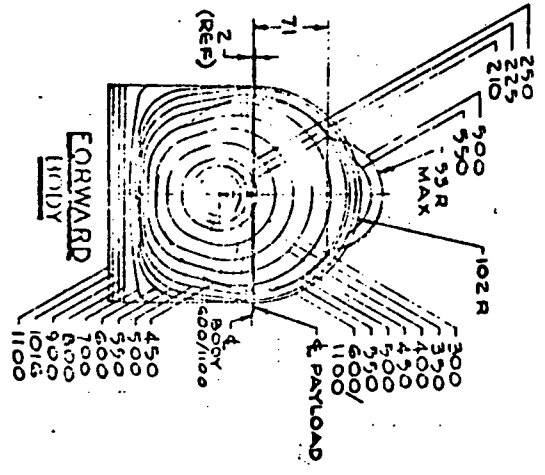
# GENERAL ARRANGEMENT O4OA ORBITER



- Notes:
1. All dimensions are in inches
  2. Model values are shown in parentheses.

Figure 20. General Arrangement O4OA Orbiter

# ORBITER BODY ~ B1



NOTES:  
 1. ALL DIMENSIONS ARE IN INCHES.  
 2. MODEL VALUES ARE SHOWN IN PARENTHESIS.

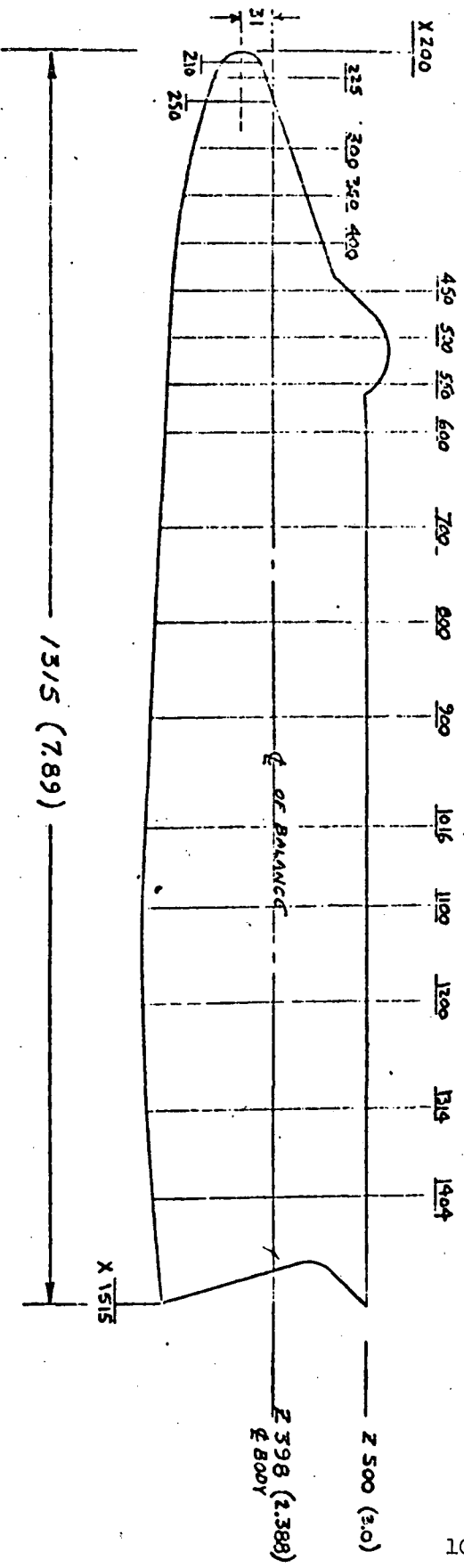
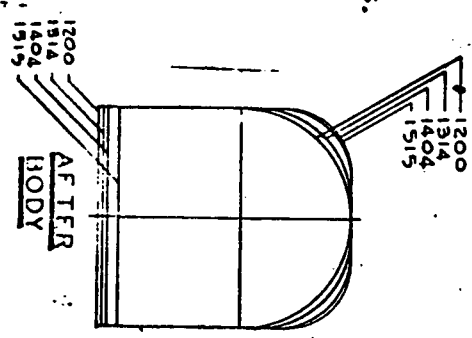
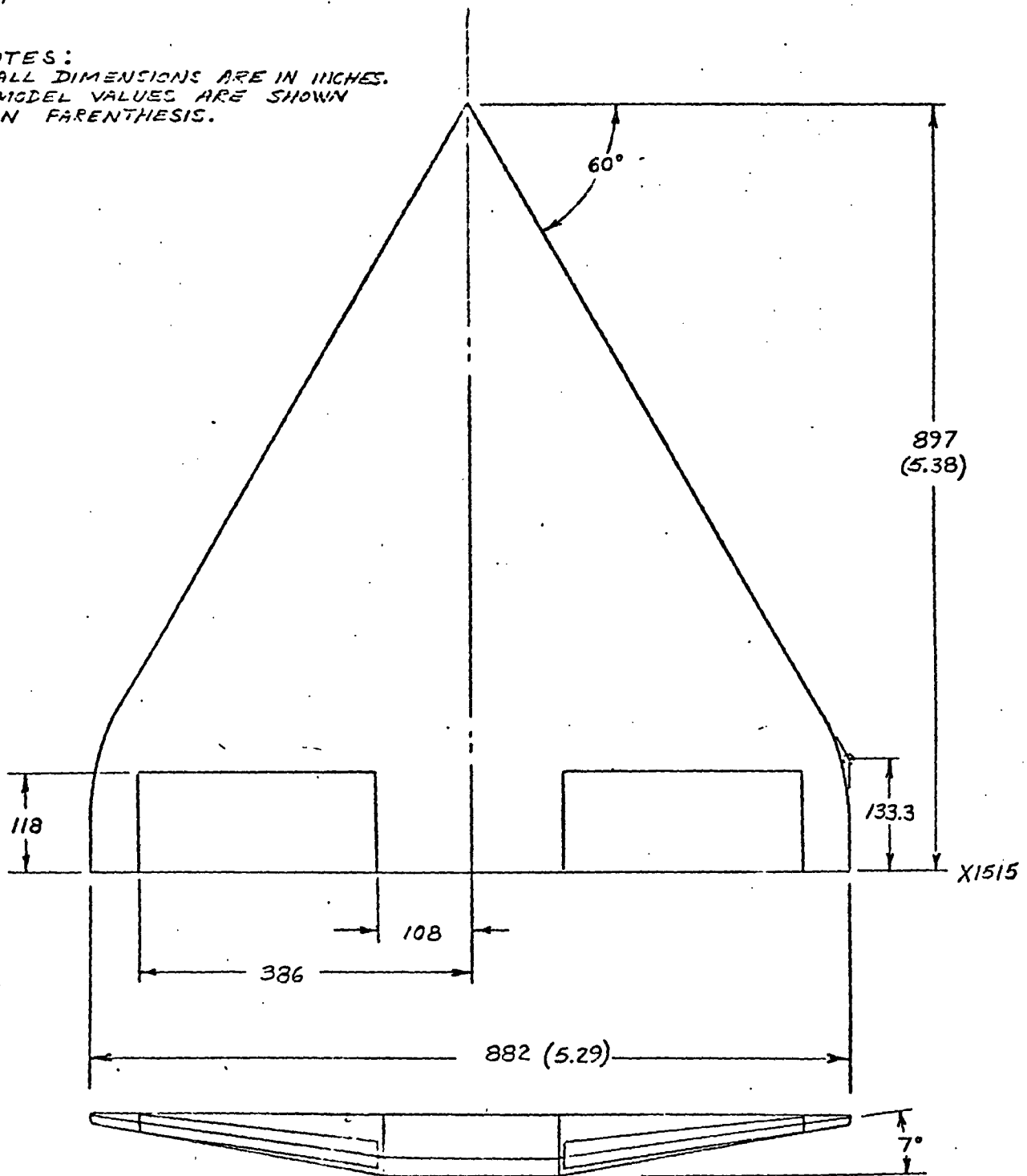


Figure 21. Orbiter Body, B<sub>1</sub>

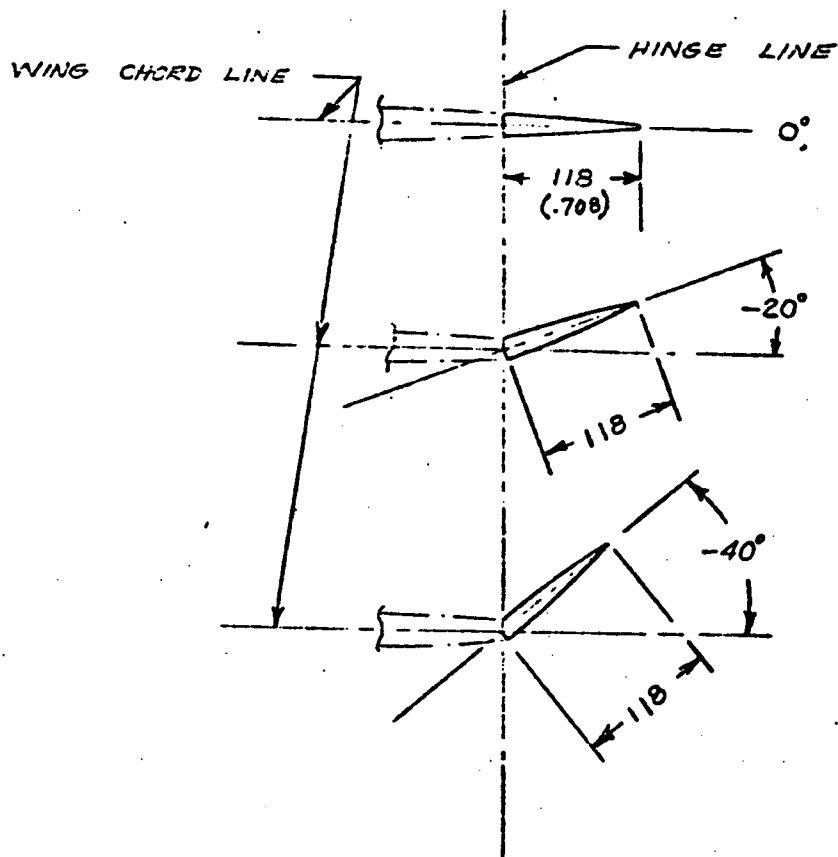
WING AND ELEYON ~ WI

NOTES:  
1. ALL DIMENSIONS ARE IN INCHES.  
2. MODEL VALUES ARE SHOWN  
IN PARENTHESIS.



.. Figure 22. Wing and Elevon,  $W_1$

## ELEVON DEFLECTIONS



## RUDDER FLARE AT A TYPICAL SECTION

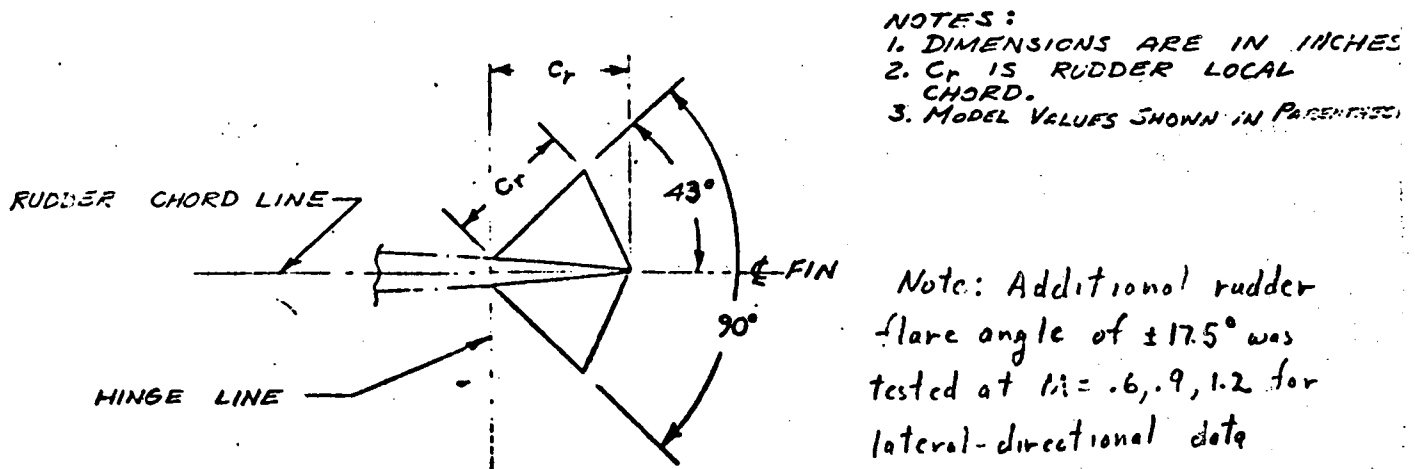
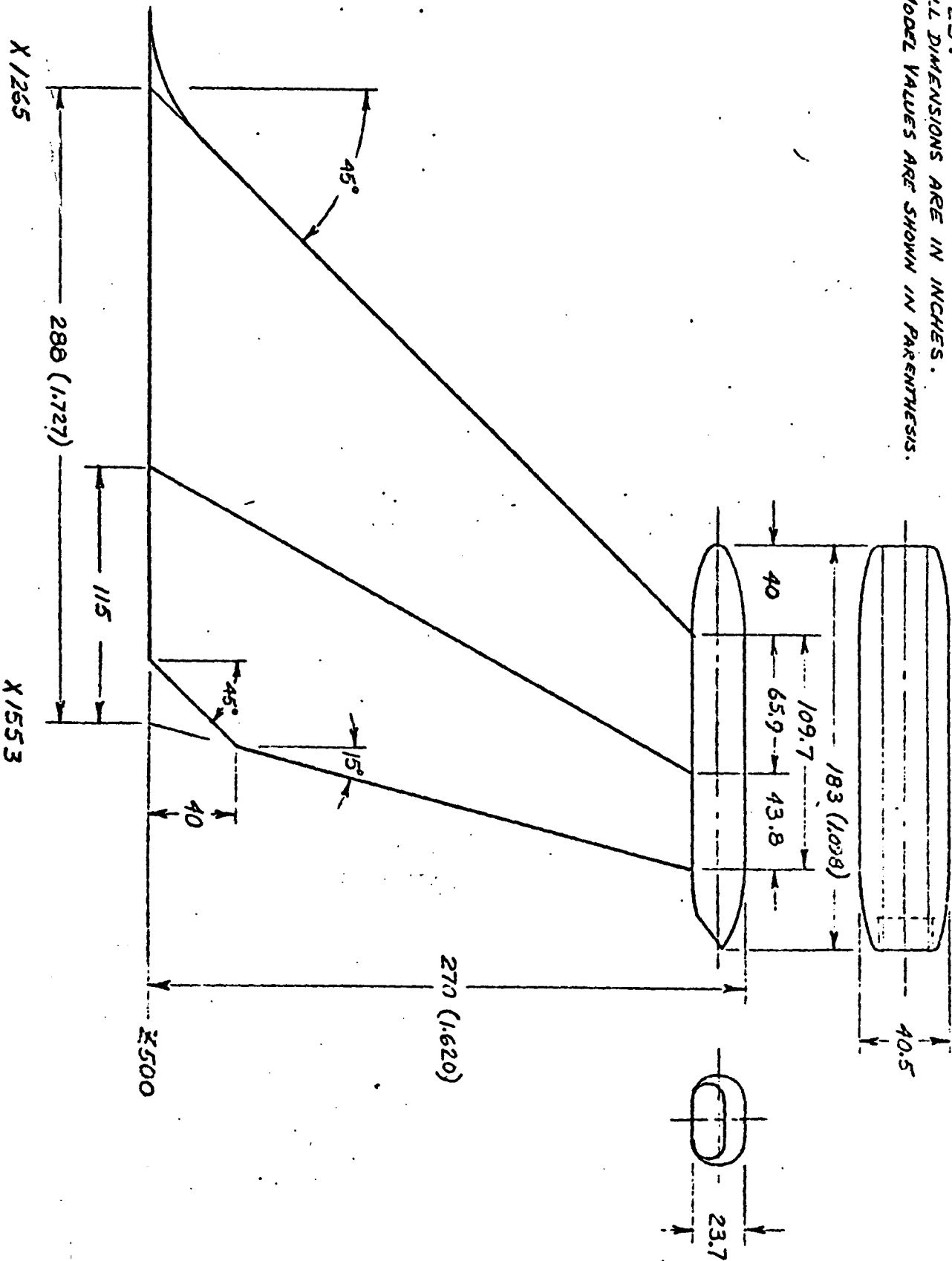


Figure 23. Elevon Deflections and Rudder Flare

Figure 24. Vertical Fin and Rudder, V<sub>1</sub>

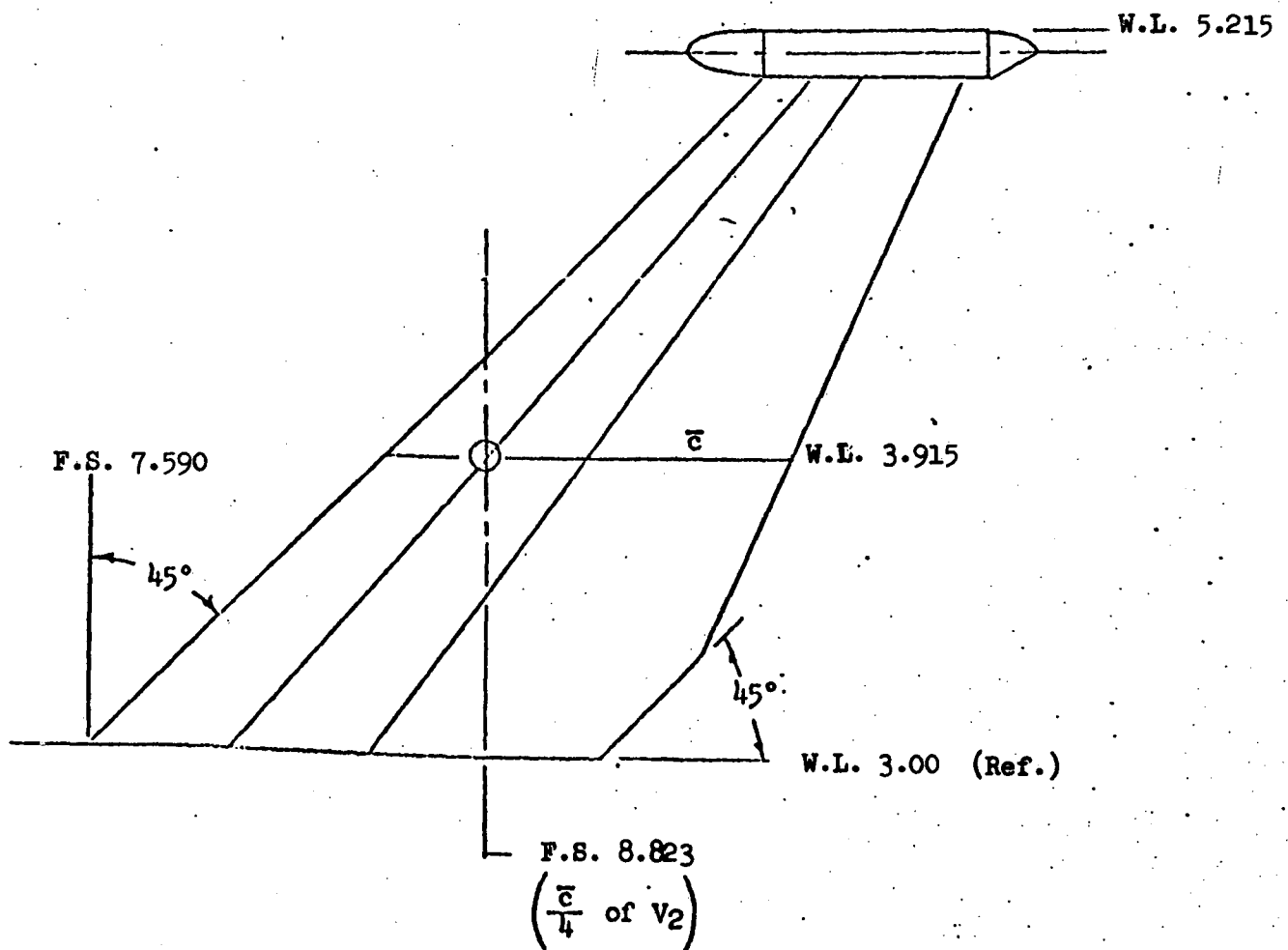
- NOTES:  
 1. ALL DIMENSIONS ARE IN INCHES.  
 2. MODEL VALUES ARE SHOWN IN PARENTHESIS.



V<sub>2</sub> - LARGER AREA CENTERLINE VERTICAL TAIL AND RUDDER

$$\begin{aligned} S_v &= 2.514 \text{ in}^2 \\ b &= 2.215 \text{ in} \\ \bar{c} &= 1.239 \text{ in} \\ AR &= 1.95 \end{aligned}$$

$$\begin{aligned} C_R &= 1.728 \text{ in} \\ C_T &= 0.542 \text{ in} \\ \lambda &= 0.310 \\ \Lambda_{LE} &= 45^\circ \end{aligned}$$



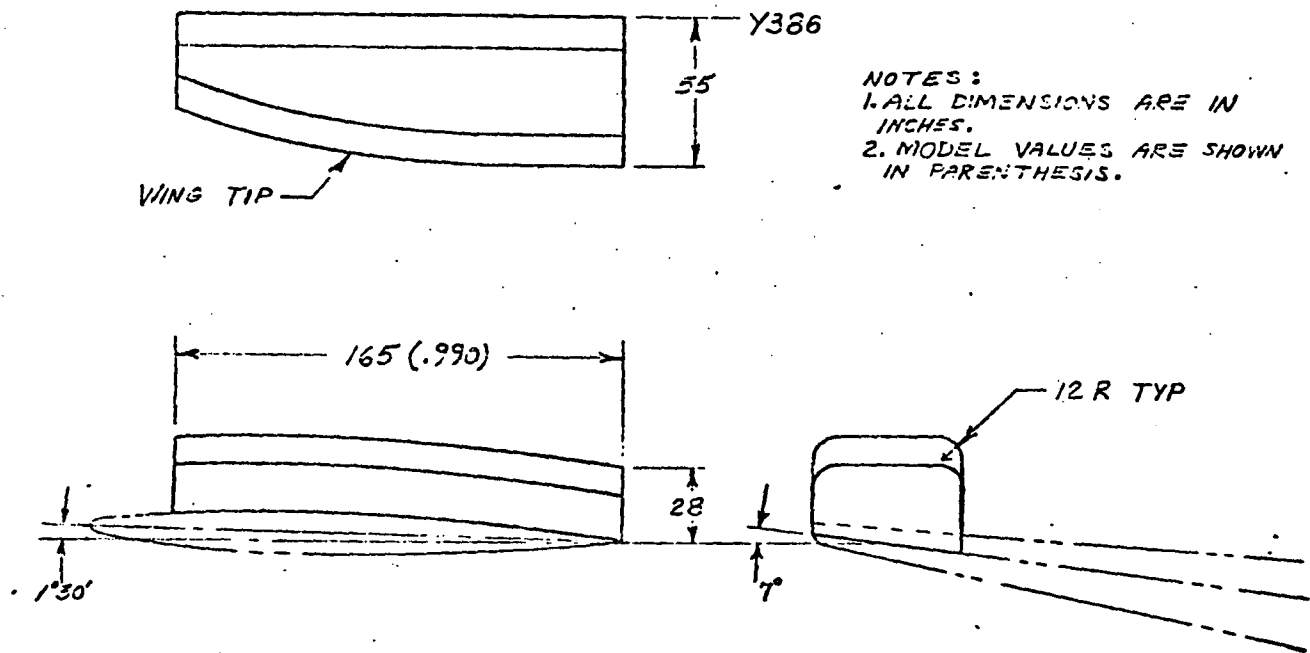
Note: All dimensions are model scale in inches.

Figure 25. Vertical Fin and Rudder, V<sub>2</sub>

MCDONNELL DOUGLAS CORPORATION



# ACPS ENGINE POD ~ P1



# OMS ENGINE POD ~ M1

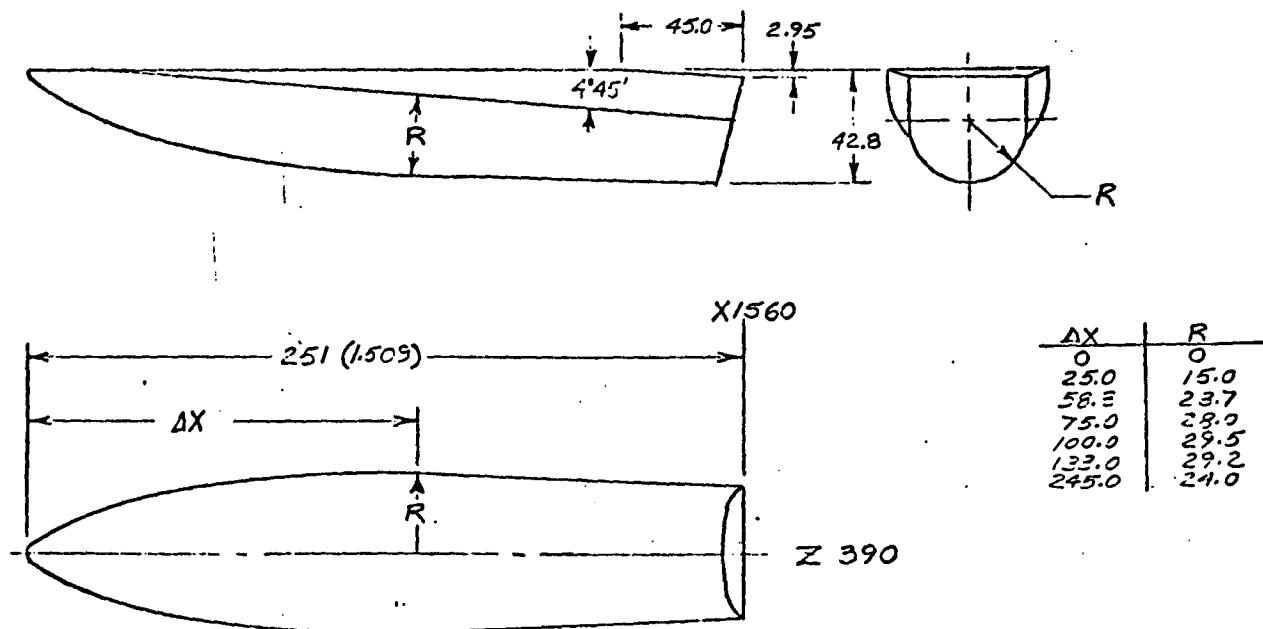
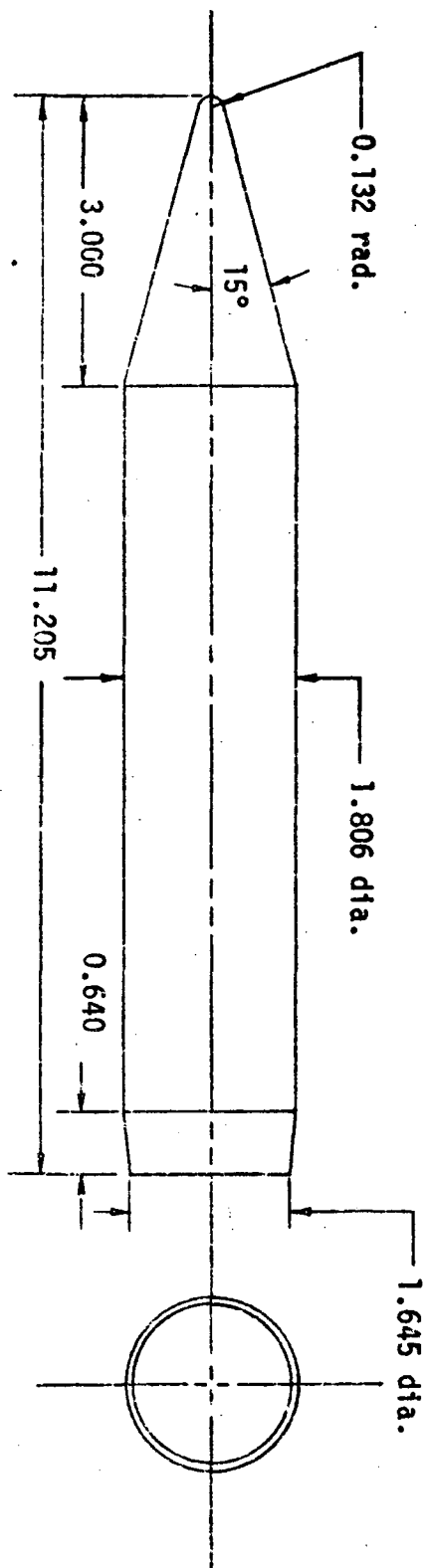


Figure 26. ACPS Engine Pod, P1 and OMS Engine Pod, M1

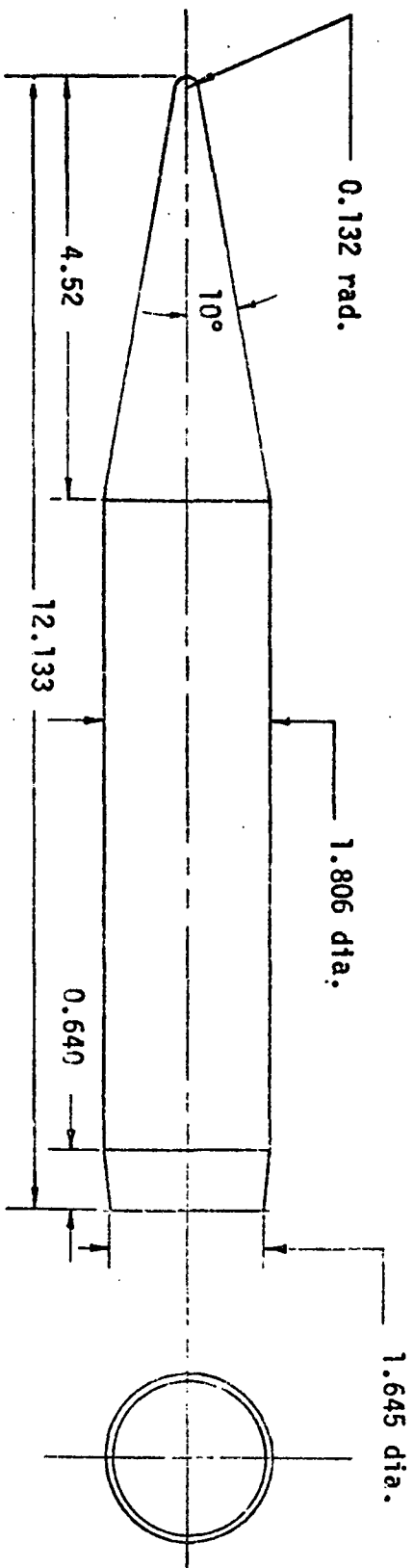
# HO TANK, T<sub>1</sub>



All dimensions are model scale, in inches.

Figure 27. Centerline HO Tank, T<sub>1</sub>

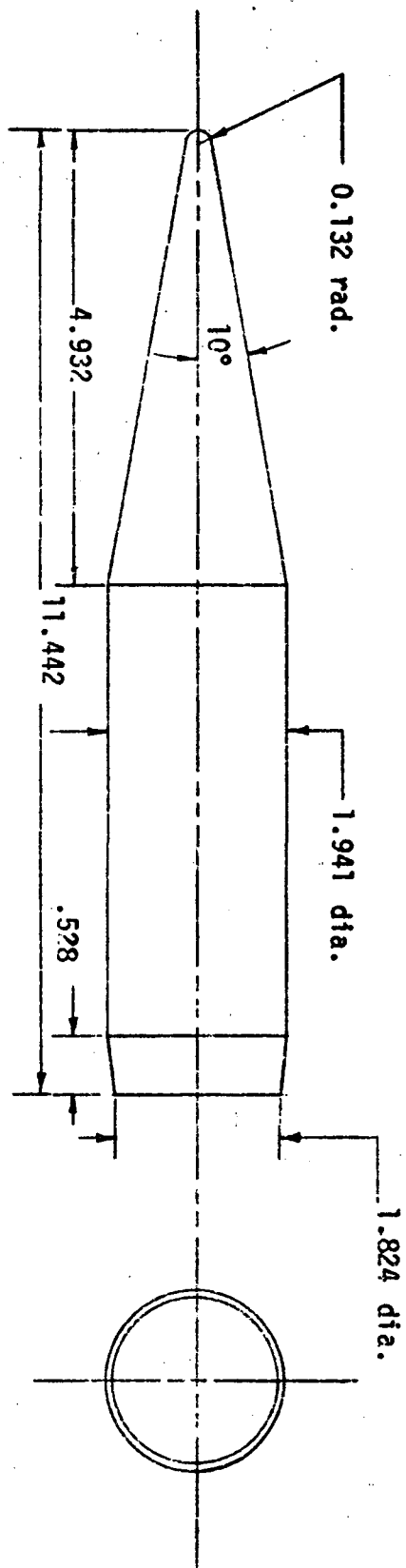
# HO TANK, T<sub>2</sub>



All dimensions are model scale, in inches.

Figure 28. Centerline HO Tank, T<sub>2</sub>

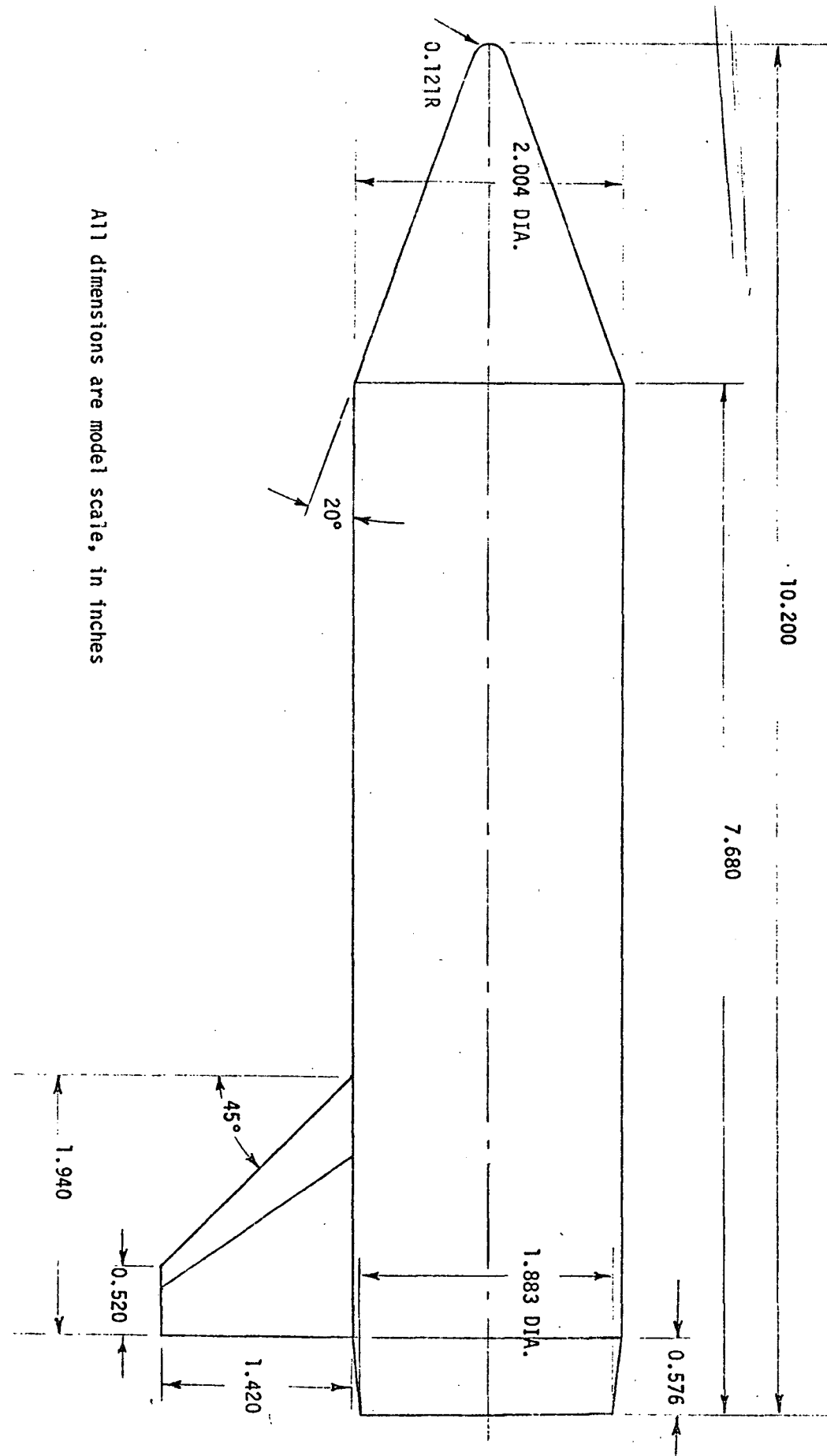
# HO TANK, T<sub>3</sub>



All dimensions are model scale, in inches.

Figure 29. Centerline HO Tank, T<sub>3</sub>

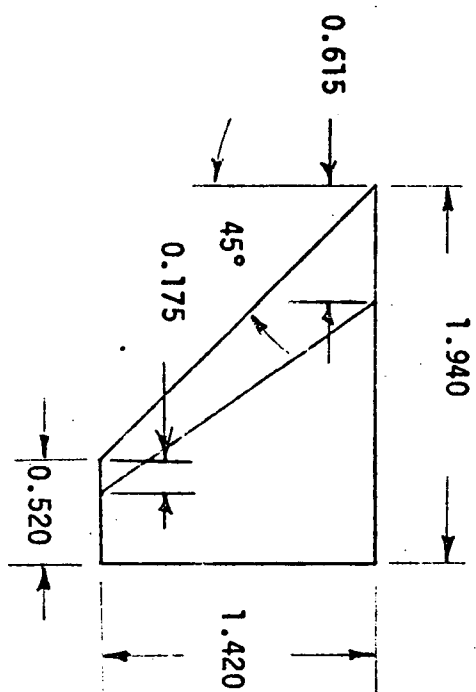
# TANK T<sub>4</sub> WITH TANK VENTRAL FIN, F<sub>1</sub>



All dimensions are model scale, in inches

Figure 30. Centerline HO Tank T<sub>4</sub> with Tank Ventral Fin, F<sub>1</sub>

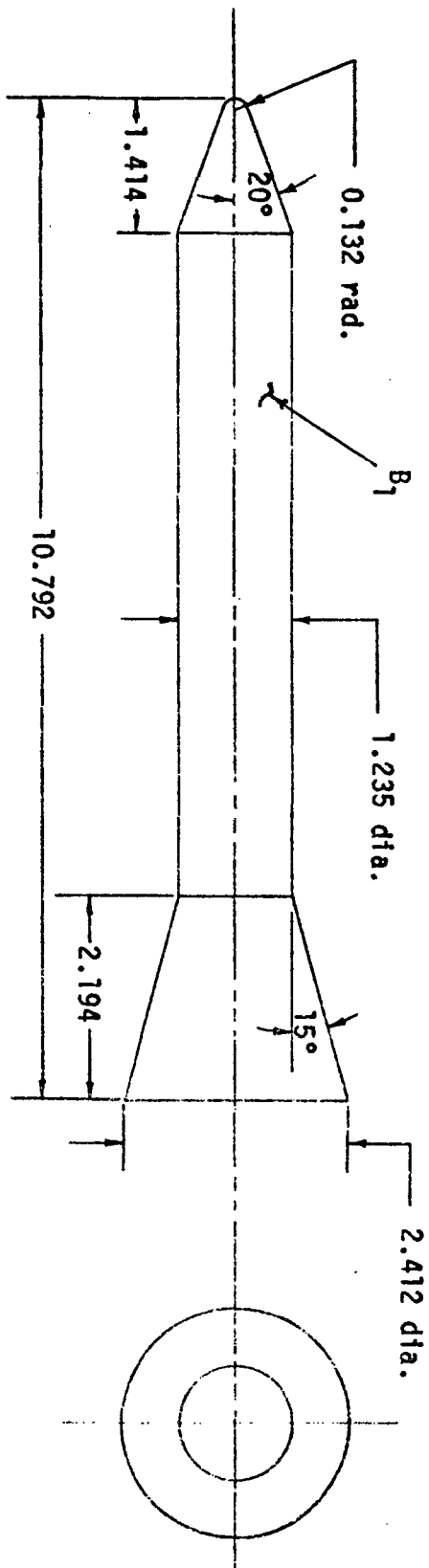
# TANK VENTRAL FIN, $F_1$



All dimensions are model scale, in inches

Figure 31. Centerline Ventral Fin,  $F_1$

# BOOSTER, B<sub>1</sub> & B<sub>5</sub>



All dimensions are model scale, in inches.

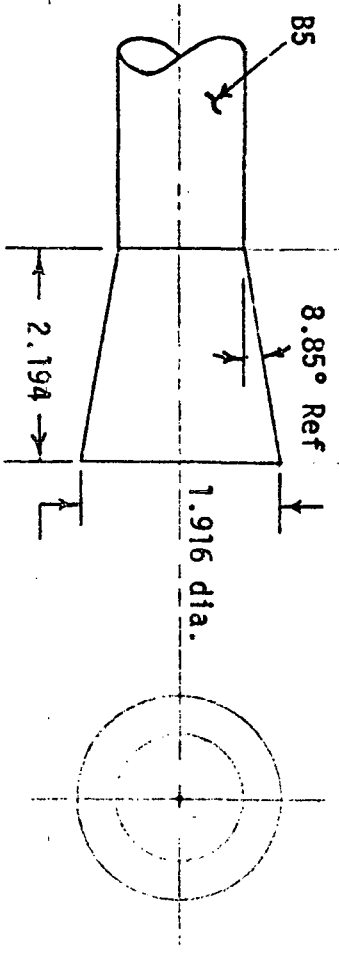


Figure 32. Boosters, B<sub>1</sub> and B<sub>5</sub>

B<sub>1</sub>S<sub>1</sub>

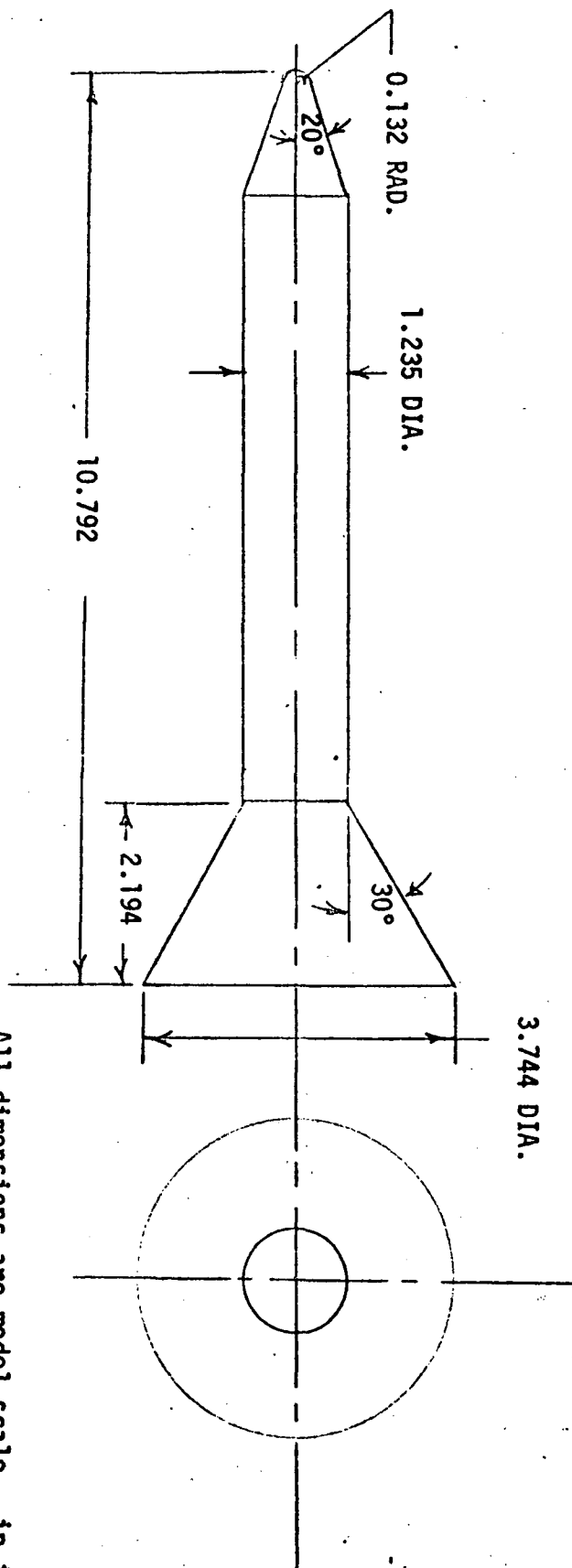
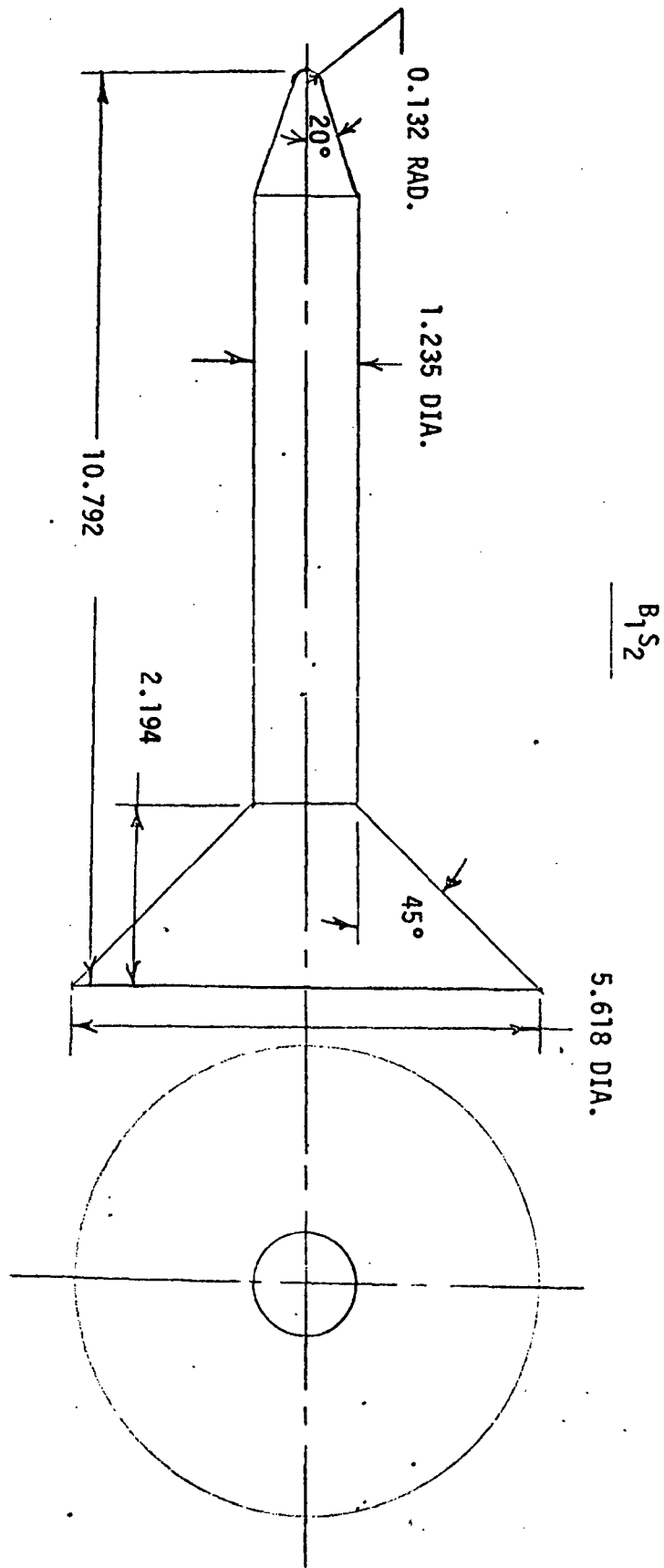


Figure 33. Booster, B<sub>1</sub>S<sub>1</sub>

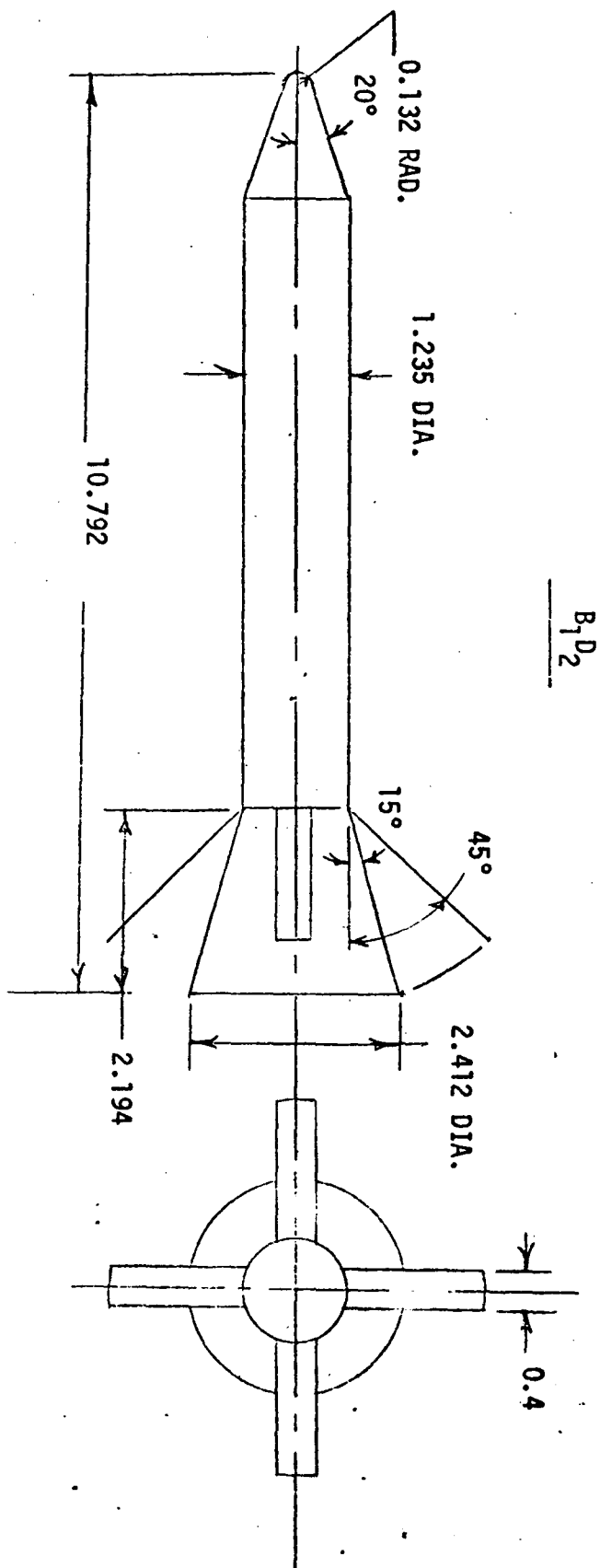
All dimensions are model scale , in inches





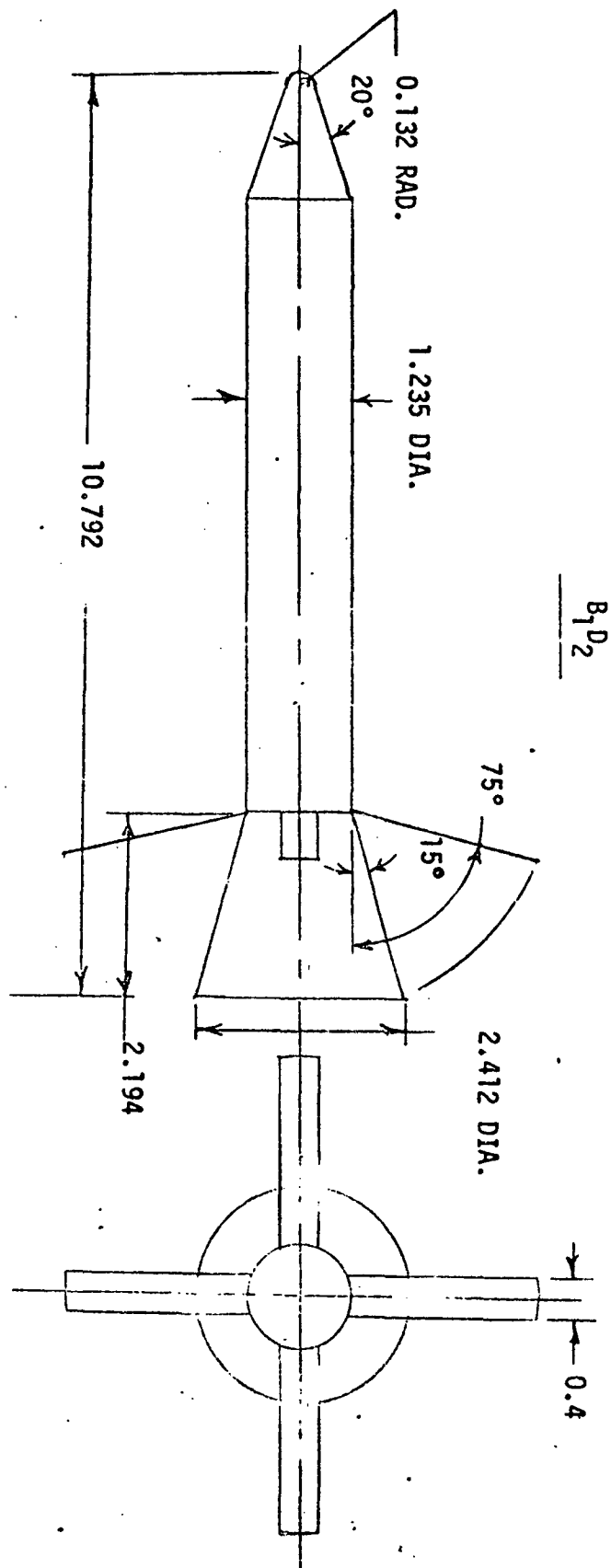
All dimensions are model scale, in inches

Figure 34. Booster,  $B_1S_2$



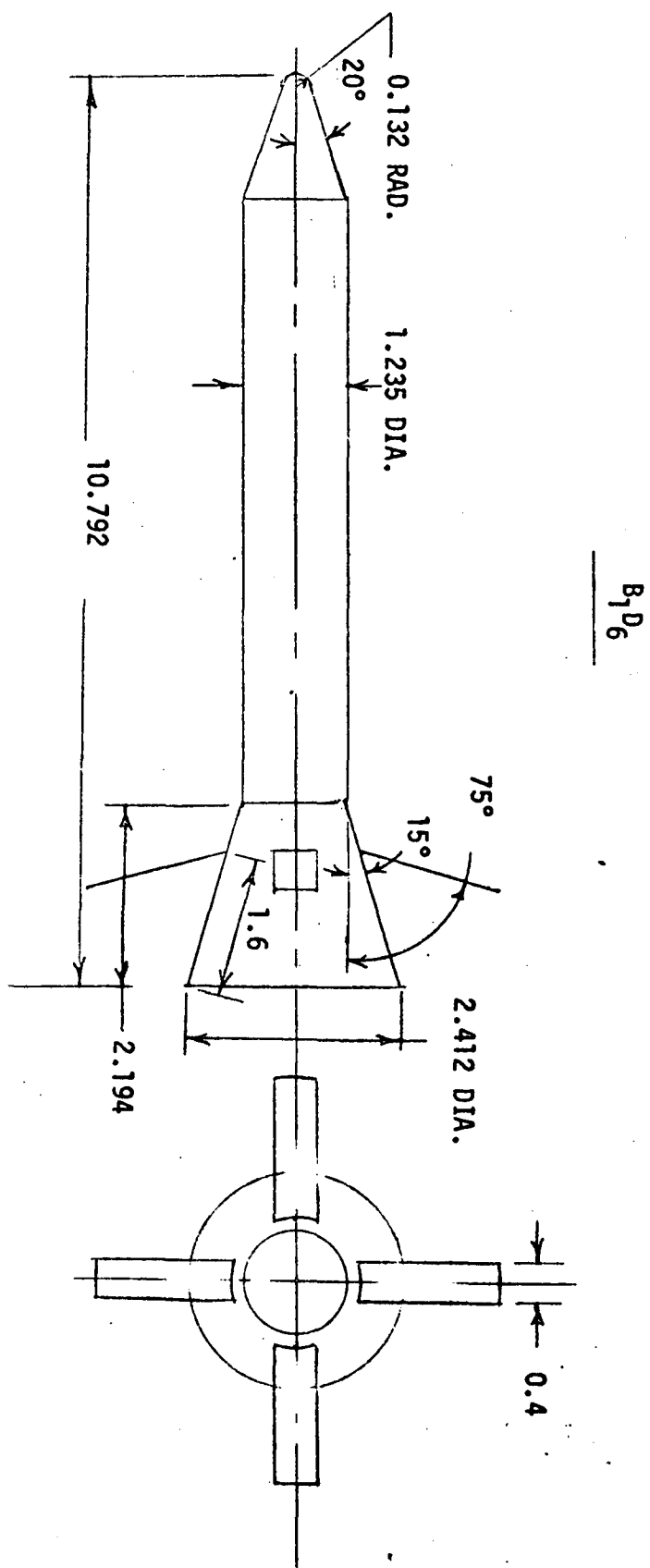
All dimensions are model scale, in inches

Figure 35. Booster,  $B_1D_2$



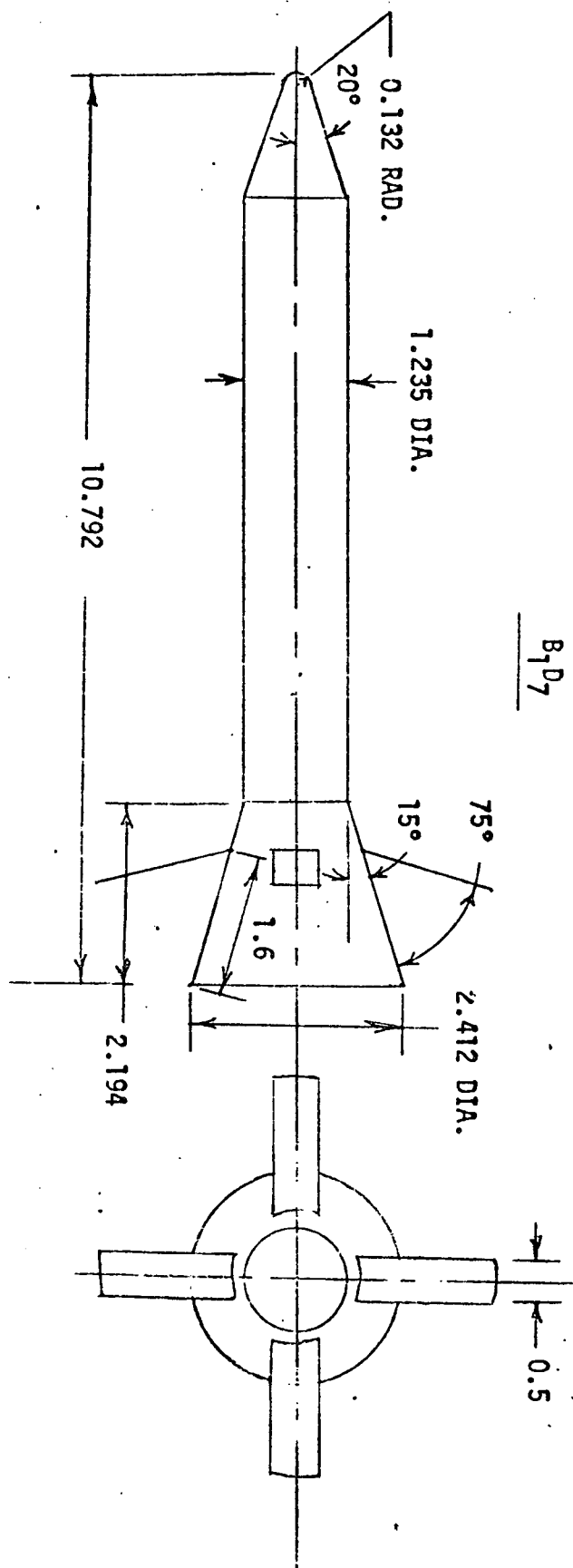
All dimensions are model scale, in inches

Figure 35. (Continued)



All dimensions are model scale, in inches

Figure 36. Booster, B<sub>1</sub>D<sub>6</sub>



All dimensions are model scale, in inches

Figure 37. Booster, B1D7

# BOOSTERS, $B_2$ & $B_{2S}$ & $B_6$

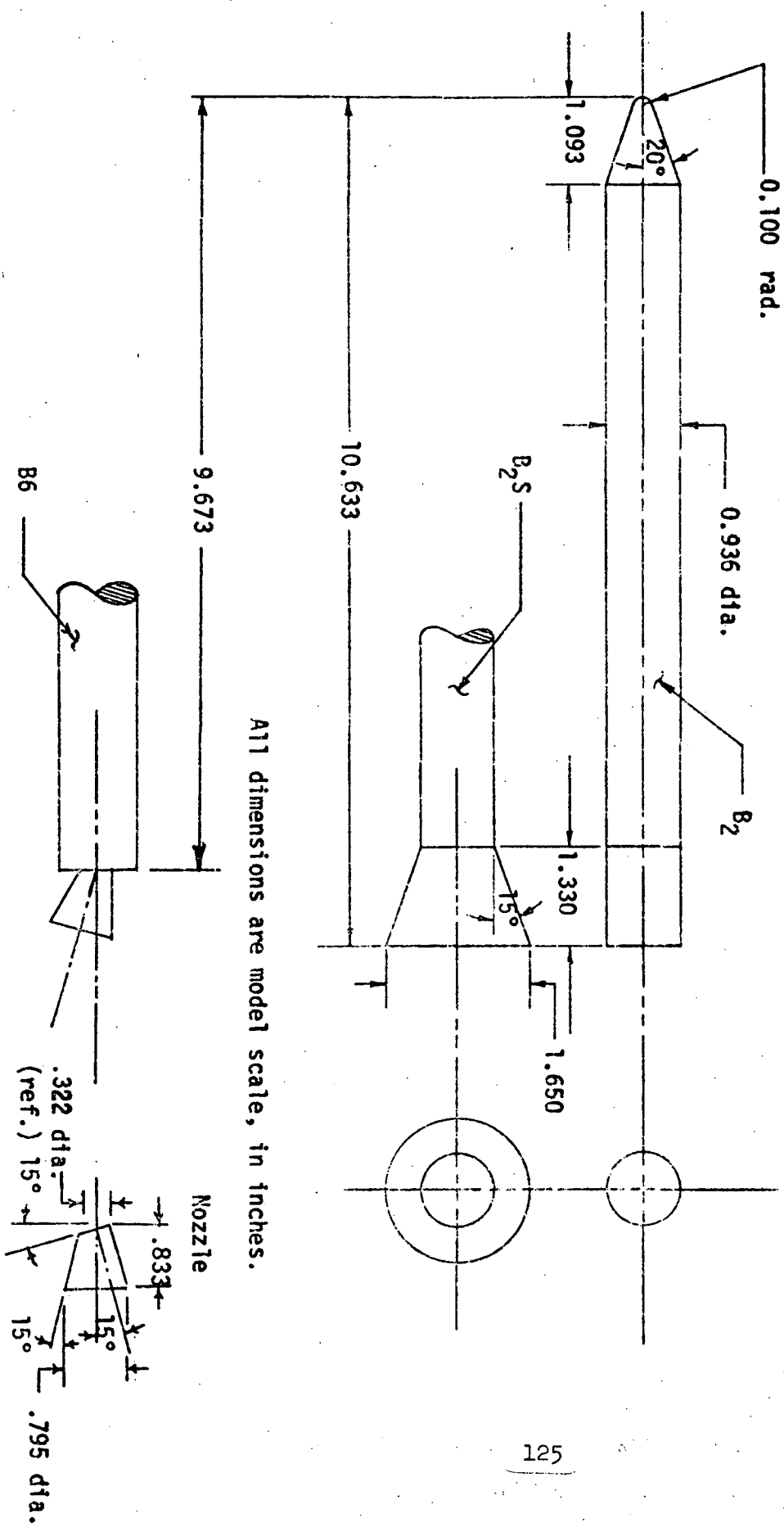
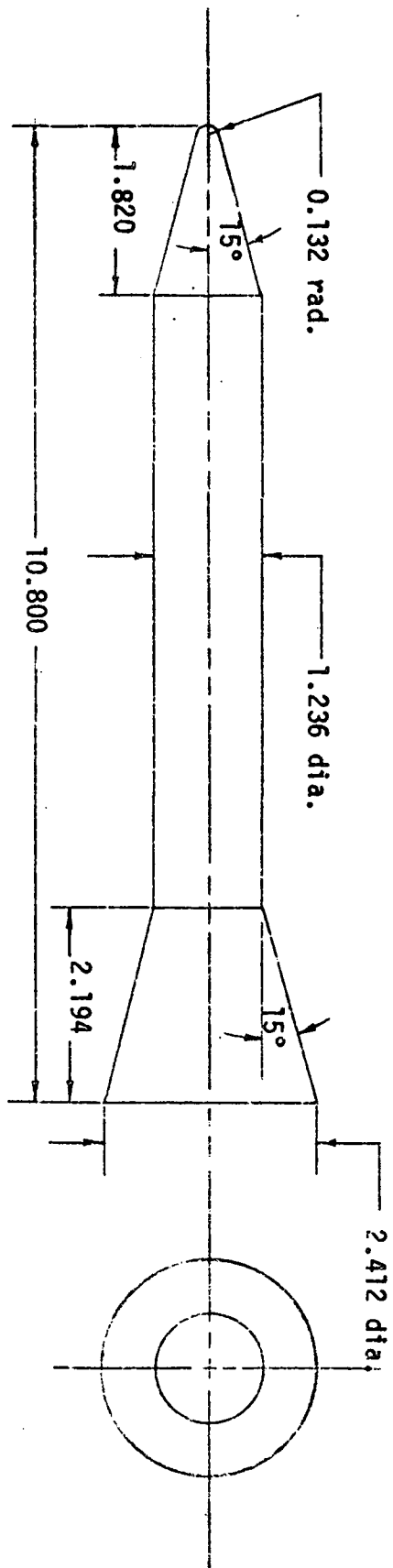


Figure 38. Boosters,  $B_2$ ,  $B_{2S}$  &  $B_6$

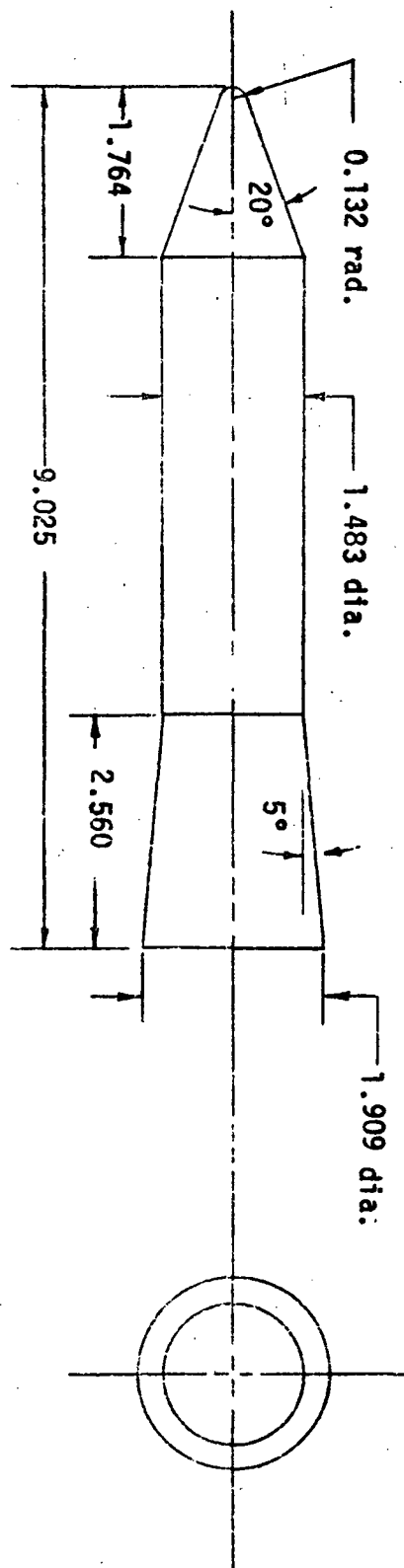
# BOOSTER, B<sub>3</sub>



All dimensions are model scale, in inches.

Figure 39. Booster, B<sub>3</sub>

# BOOSTER, B<sub>4</sub>

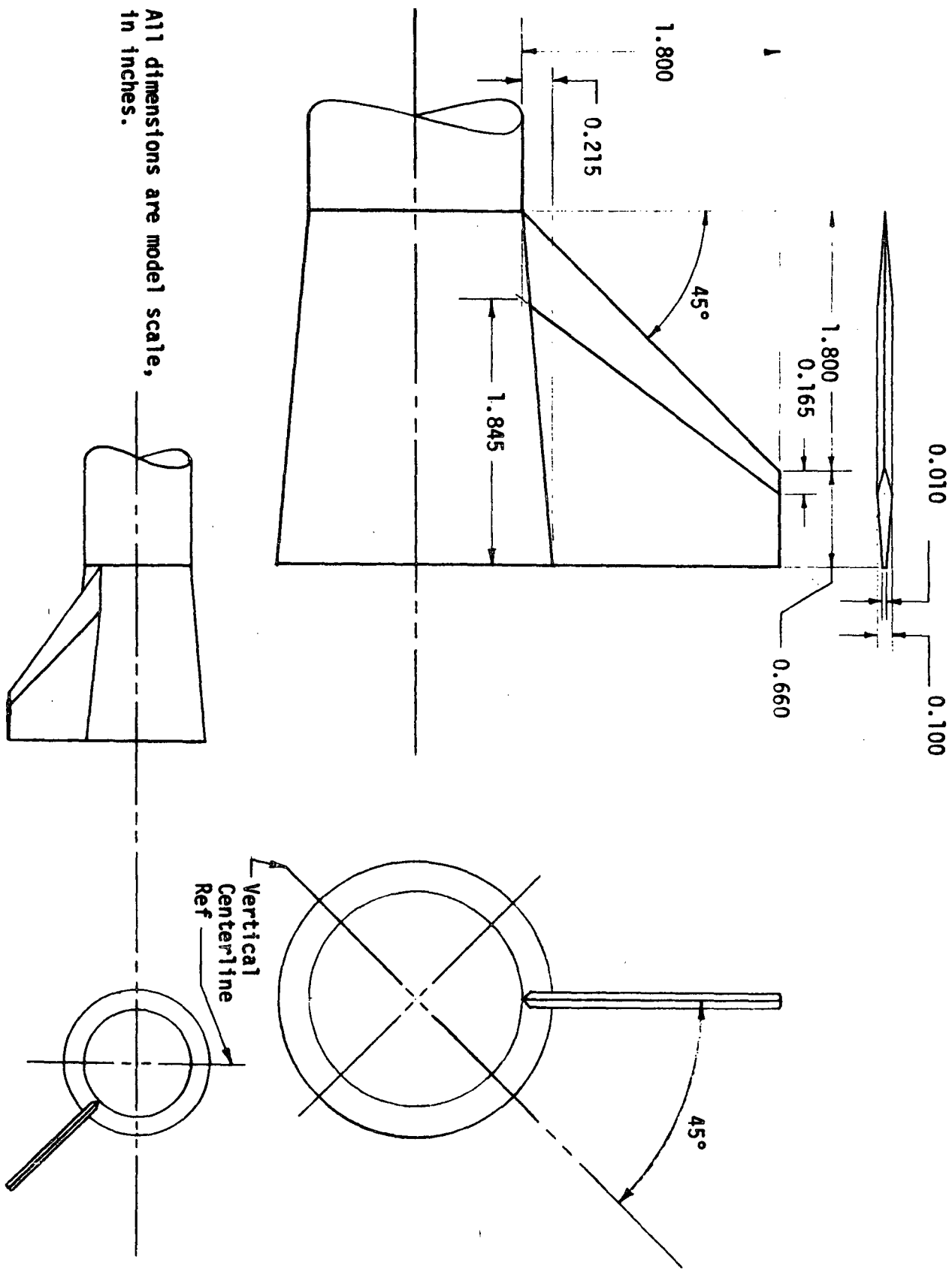


All dimensions are model scale, in inches.

Figure 40. Booster, B<sub>4</sub>

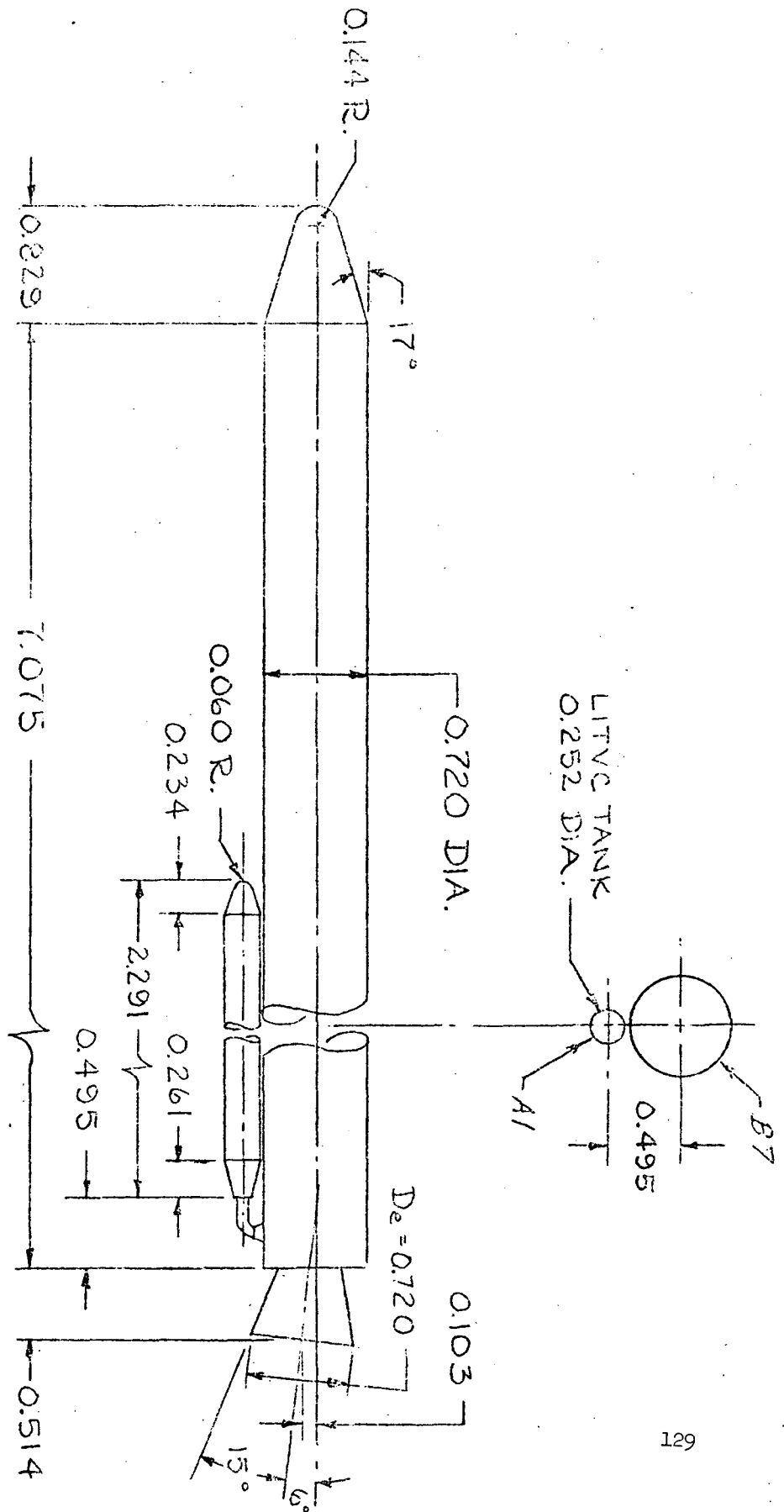


FIN,  $F_4$   
(Shown mounted on Booster,  $B_4$ )



All dimensions are model scale,  
in inches.

Figure 41. Booster Fin  $F_4$  Mounted on Booster  $B_4$



129

B7A1

Figure 42. Booster, B7A1

0.6% SCALE MODEL  
120 INCH, 7 SEGMENT SRM

SCALE: FULL  
REVISIONS 1-15-72 HRM012072

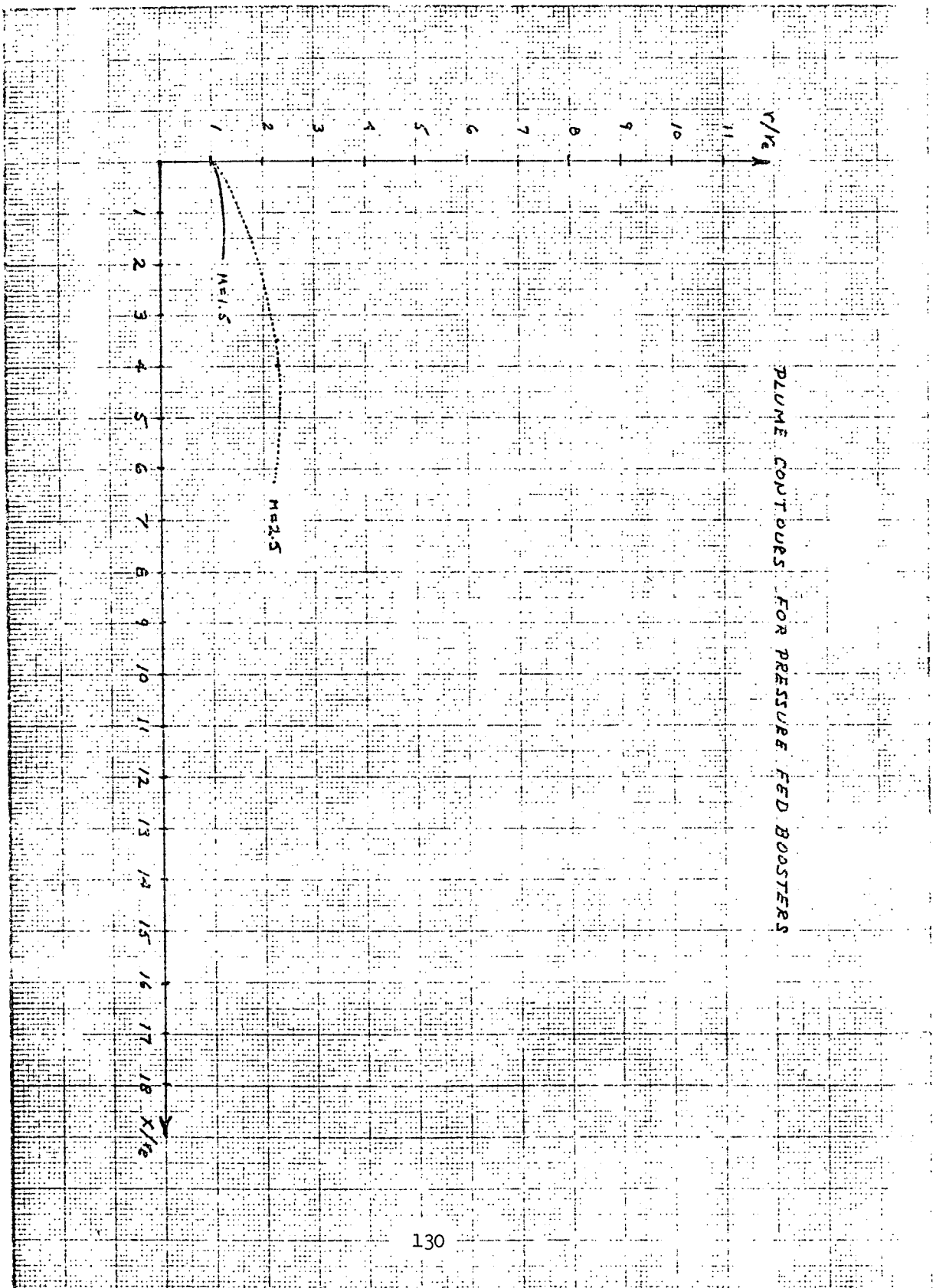
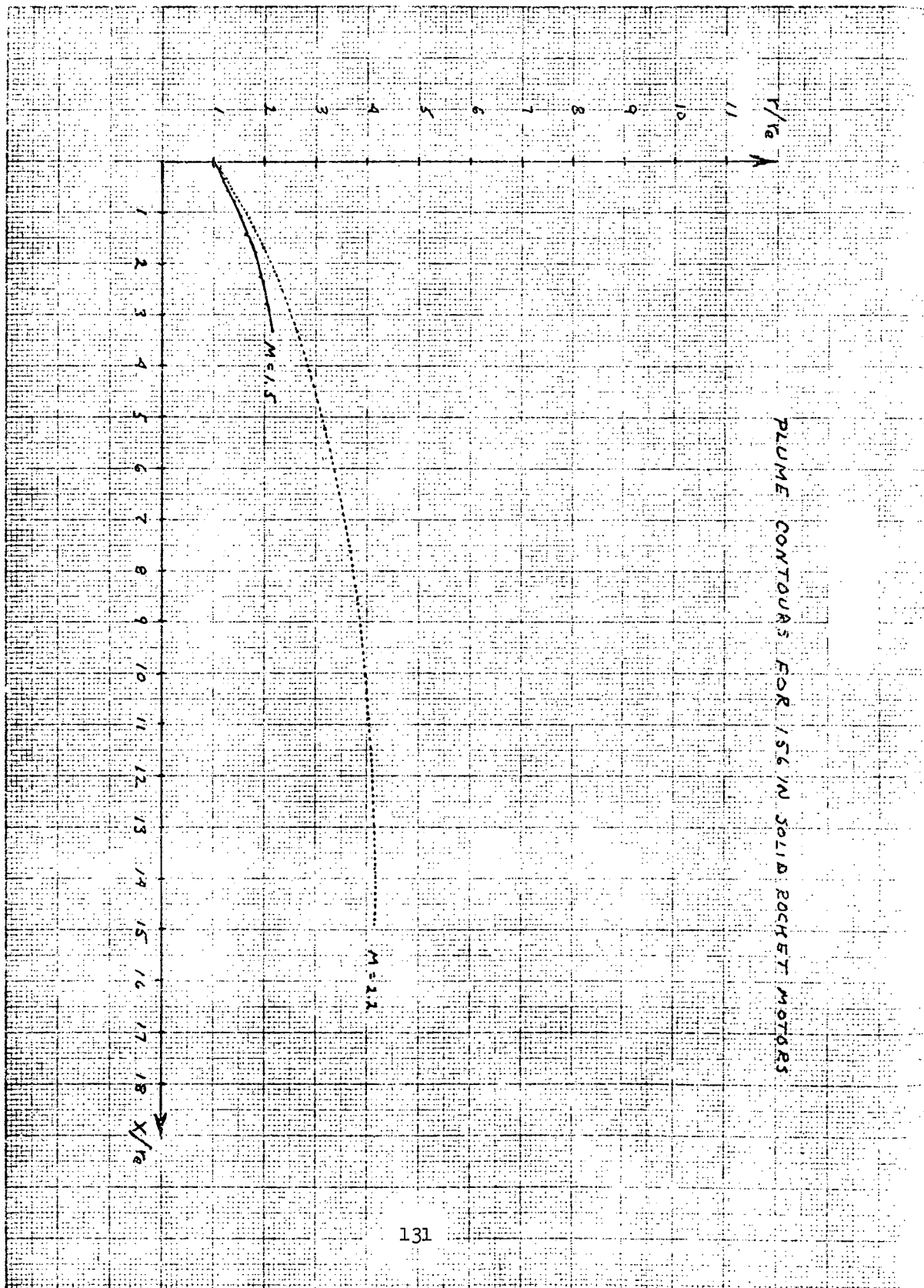


Figure 43. Plume Contours for Pressure Fed Boosters

Figure 44. Plume Contours for 156 Inch Solid Rocket Motors



PREPARED BY: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

TITLE: \_\_\_\_\_

PAGE: \_\_\_\_\_

DIVISION \_\_\_\_\_

MODEL \_\_\_\_\_

REPORT NO.: \_\_\_\_\_

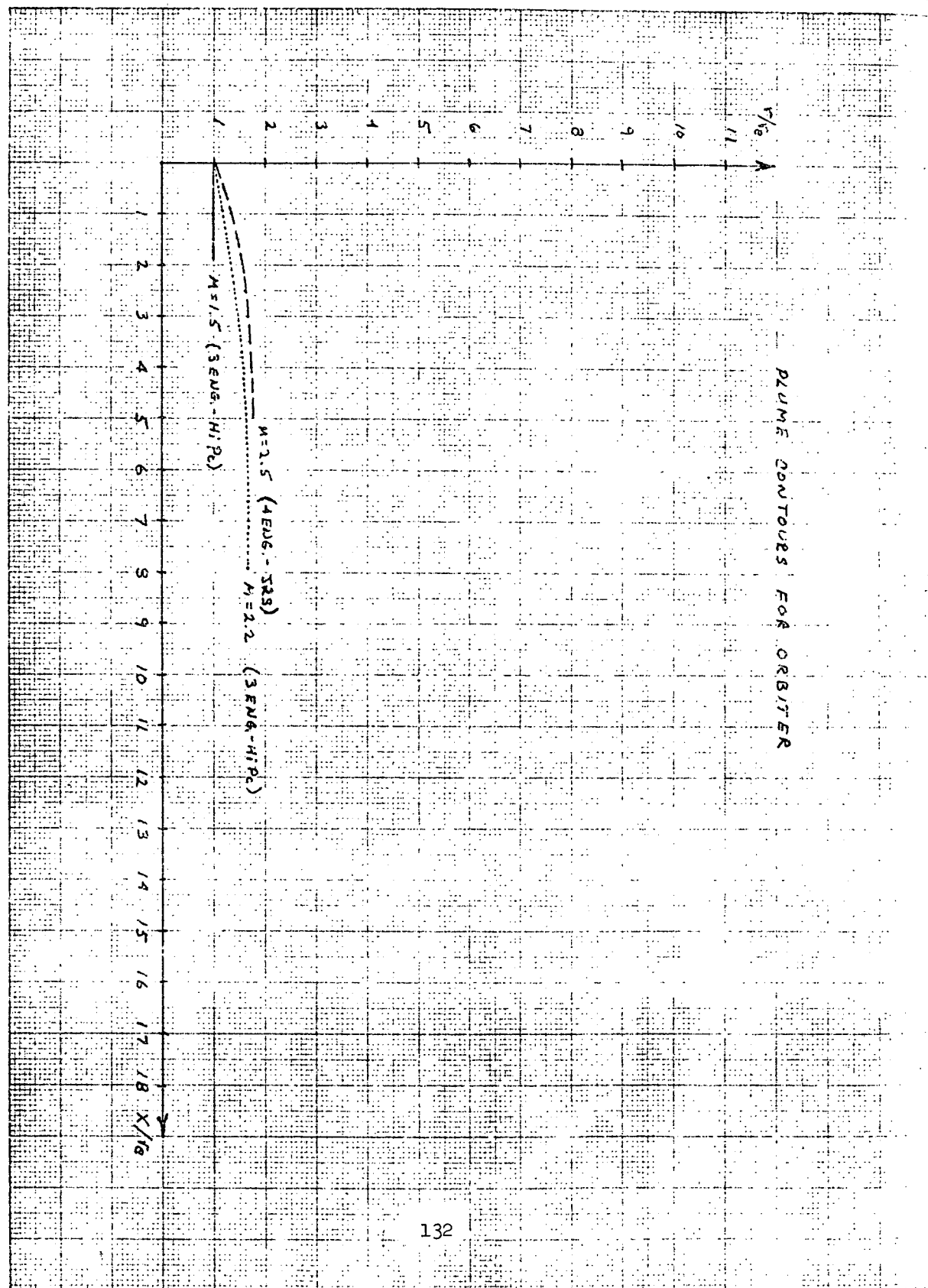
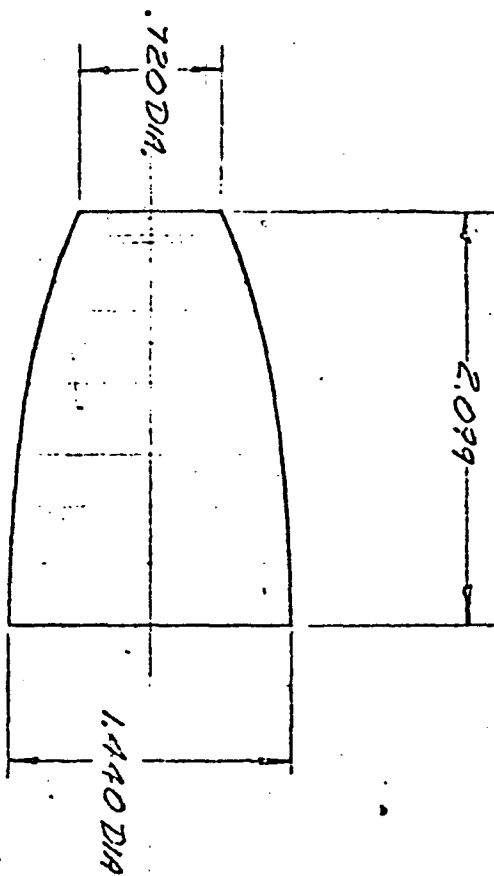


Figure 45. Plume Contour for Orbiter

M1.5 PLUME - B<sub>7</sub> BOOSTER



M2.2 PLUME - B<sub>7</sub> BOOSTER

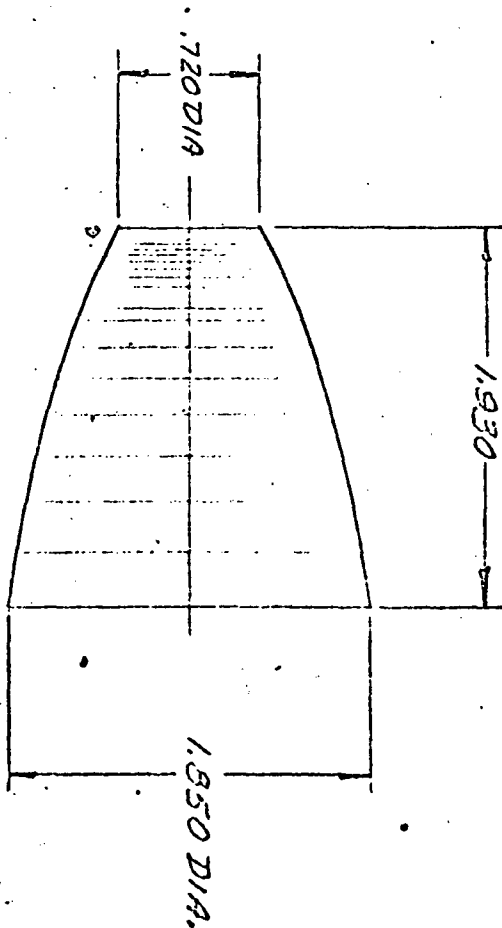
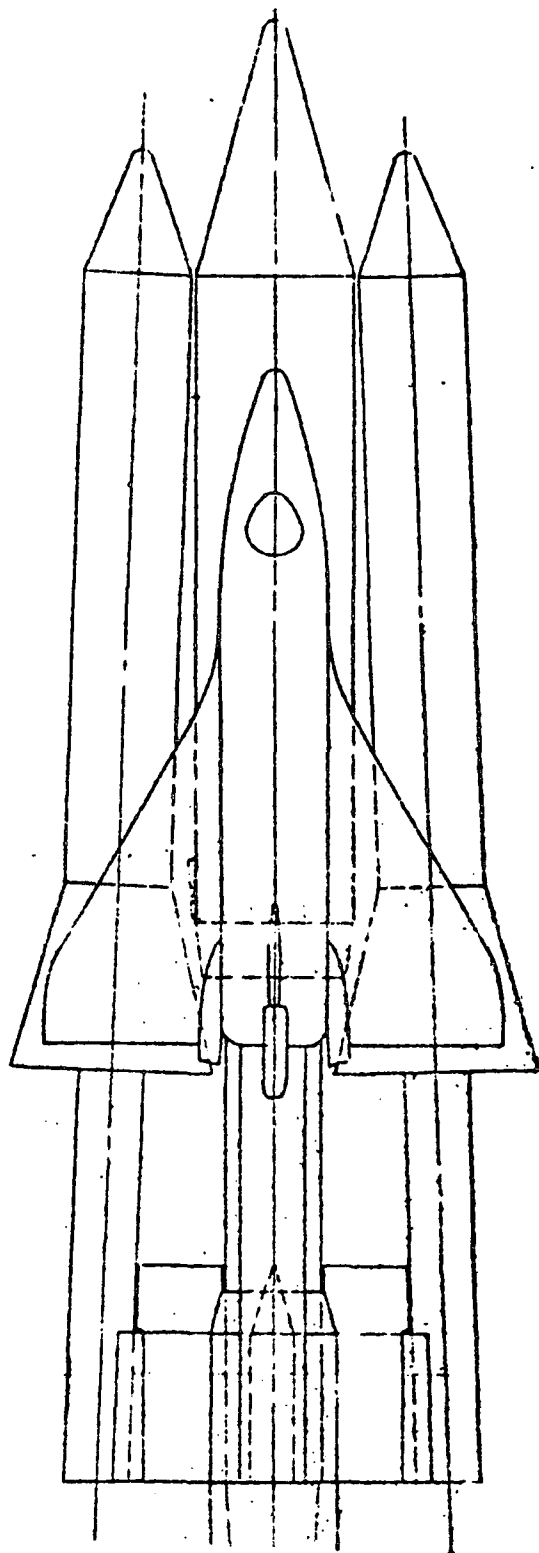


Figure 46. Sketch of Plume for Booster B<sub>7</sub>



MODEL SUPPORT SYSTEM DETAIL

Configuration shown  
provides independent  
support for boosters  
tank and orbiter.

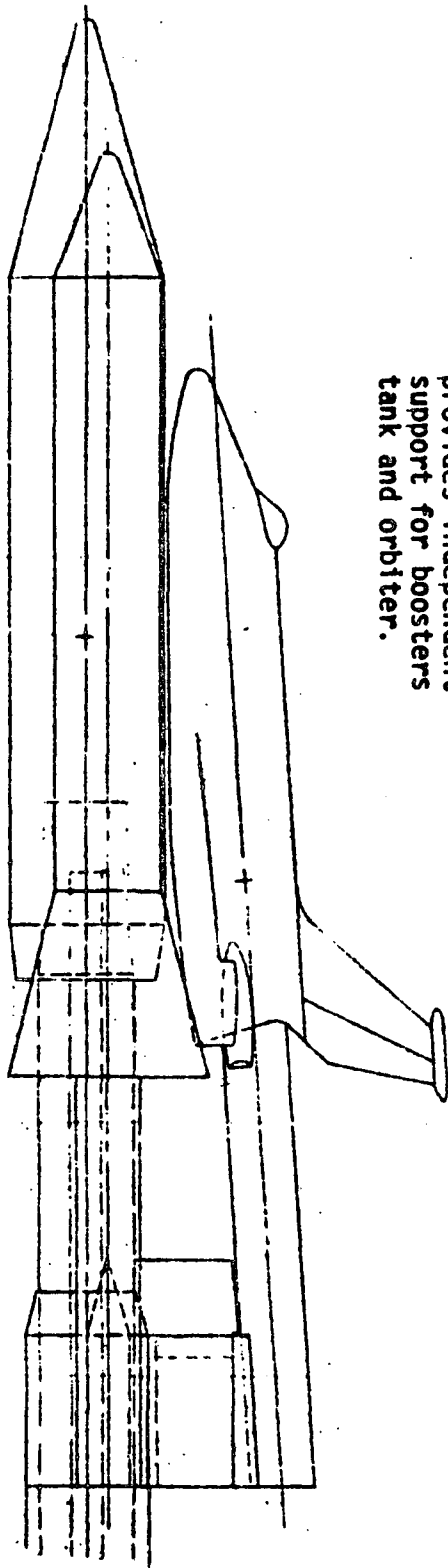
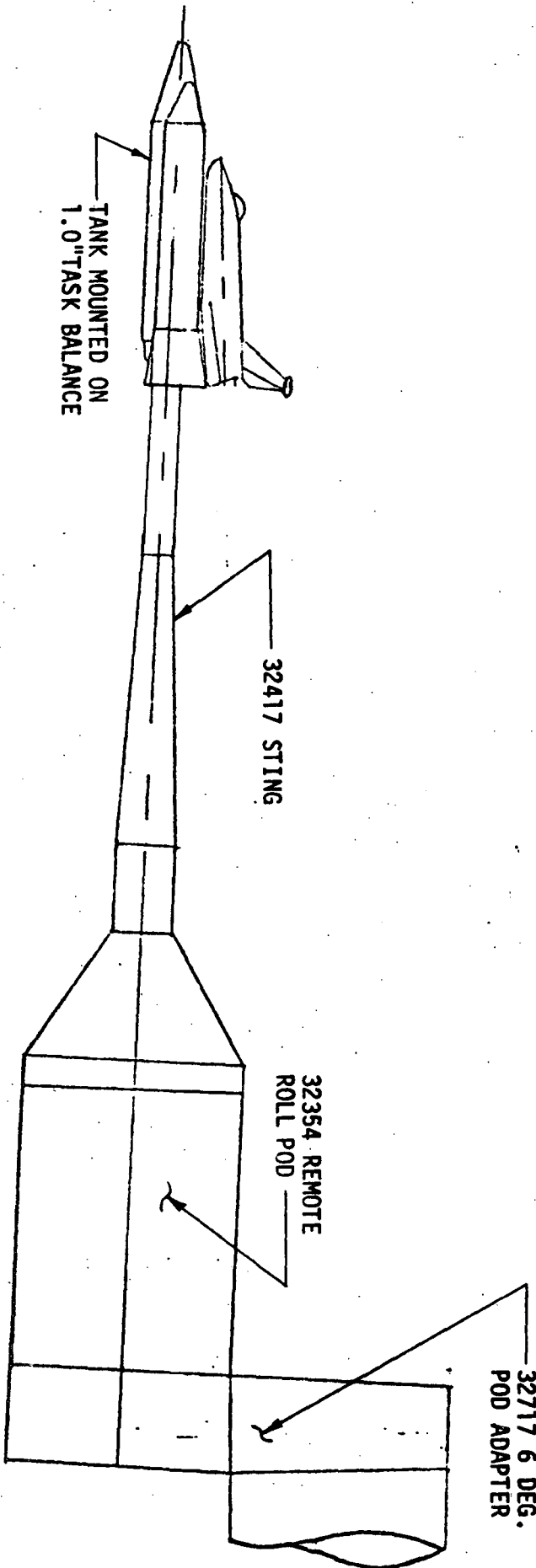
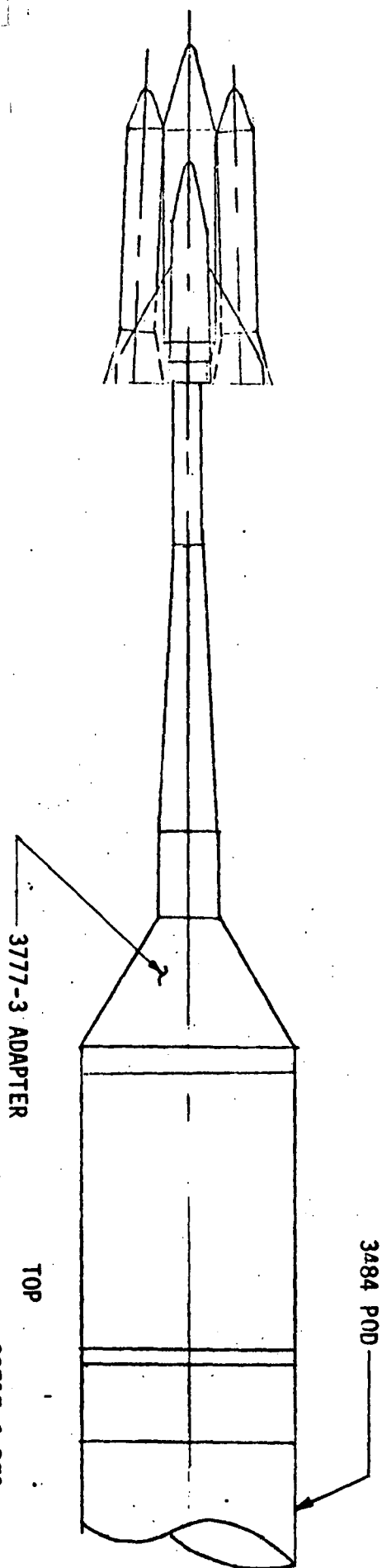


Figure 47. Tunnel Installation for the OBT Configuration-Pitch Series  
(Orbiter, Tank and Booster Independently Supported)

# TUNNEL INSTALLATION FOR THE OBT CONFIGURATION PITCH SERIES

Boosters and Orbiter fixed to centerline tank.



TANK MOUNTED ON  
1.0" TASK BALANCE

Figure 48. Tunnel Installation for the OBT Configuration-Pitch Series  
(Booster and Orbiter Fixed to Centerline Tank)



# TUNNEL INSTALLATION FOR THE OBT CONFIGURATION PITCH SERIES

Boosters fixed to centerline tank.

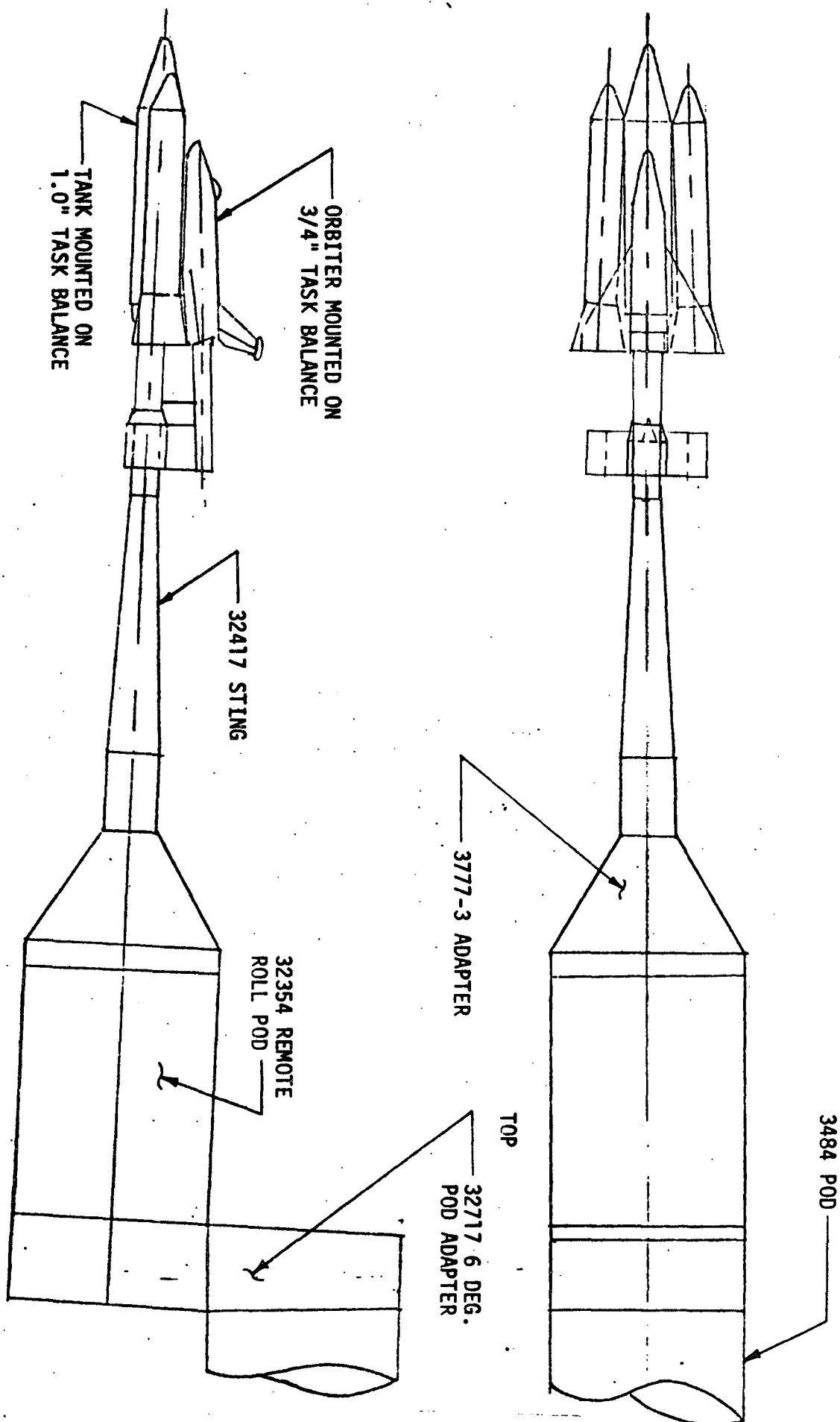


Figure 49. Tunnel Installation for the OBT Configuration-Pitch Series  
(Booster Fixed to Centerline Tank)

# TUNNEL INSTALLATION FOR THE OBT CONFIGURATION PITCH SERIES

Right Booster fixed to centerline tank, left Booster independently supported.

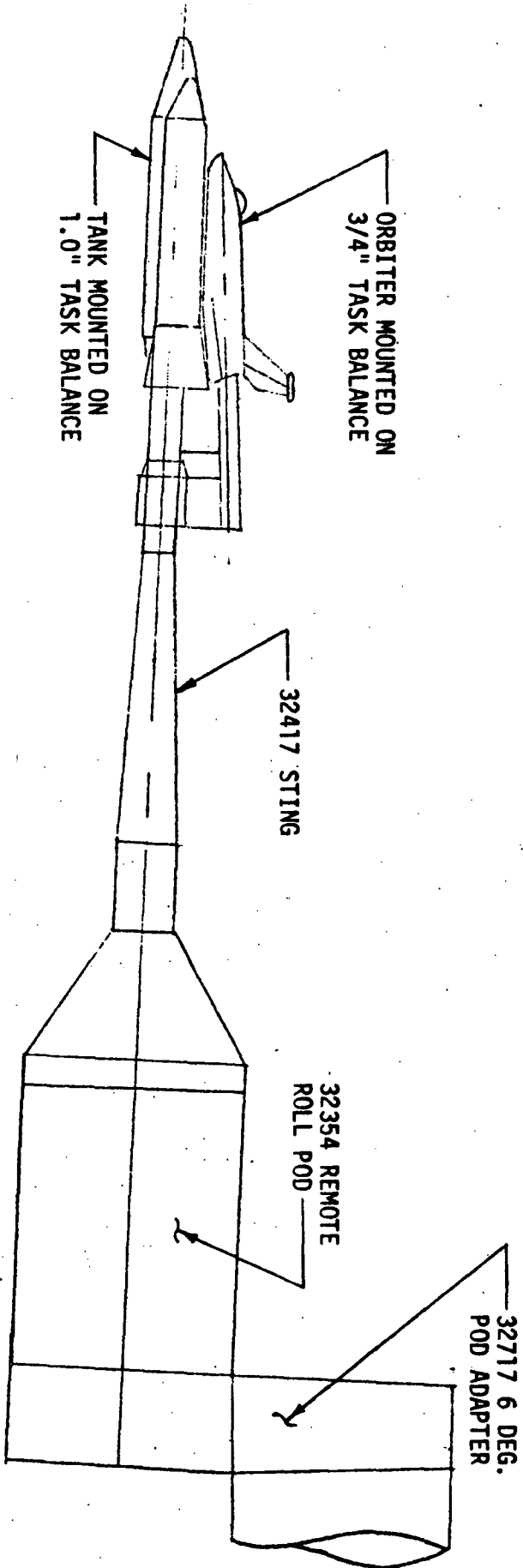
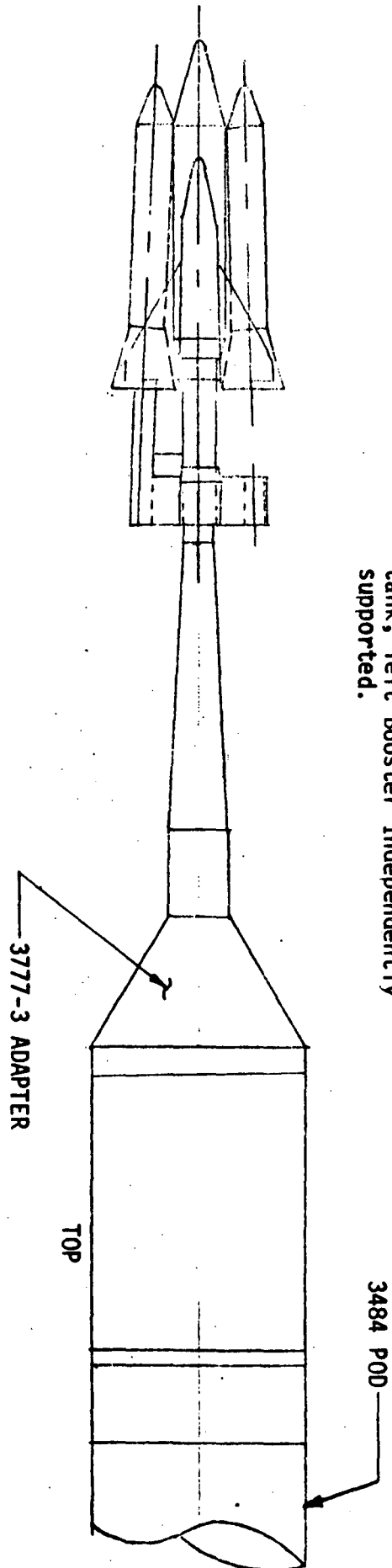


Figure 50. Tunnel Installation for the OBT Configuration-Pitch Series  
(Right Booster Fixed to Centerline Tank, Left Booster Independently Supported)

# TUNNEL INSTALLATION FOR THE OBT CONFIGURATION PITCH SERIES

Left and Right boosters independently supported with centerline tank, T1 in forward position.

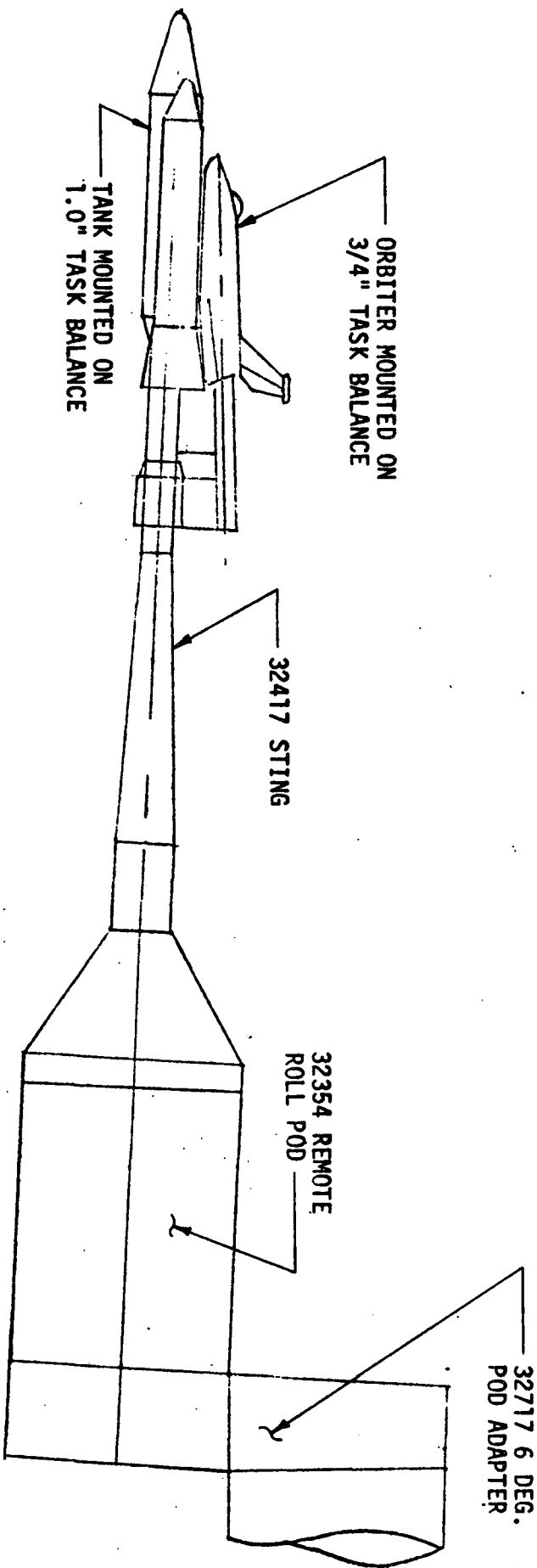
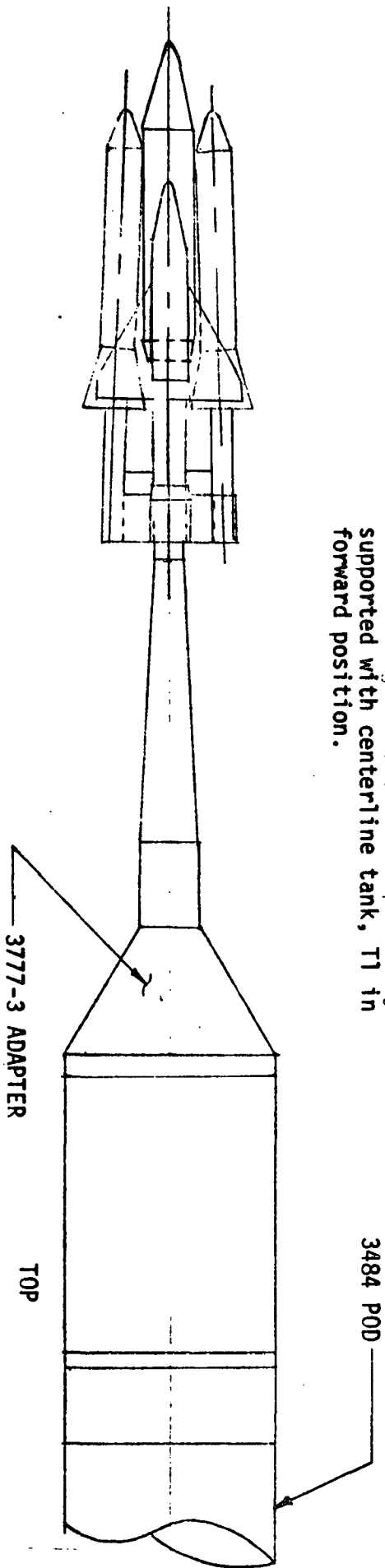


Figure 51. Tunnel Installation for the OBT Configuration-Pitch Series  
(Left and Right Booster Independently Supported)

# TUNNEL INSTALLATION FOR THE OBT CONFIGURATION PITCH SERIES

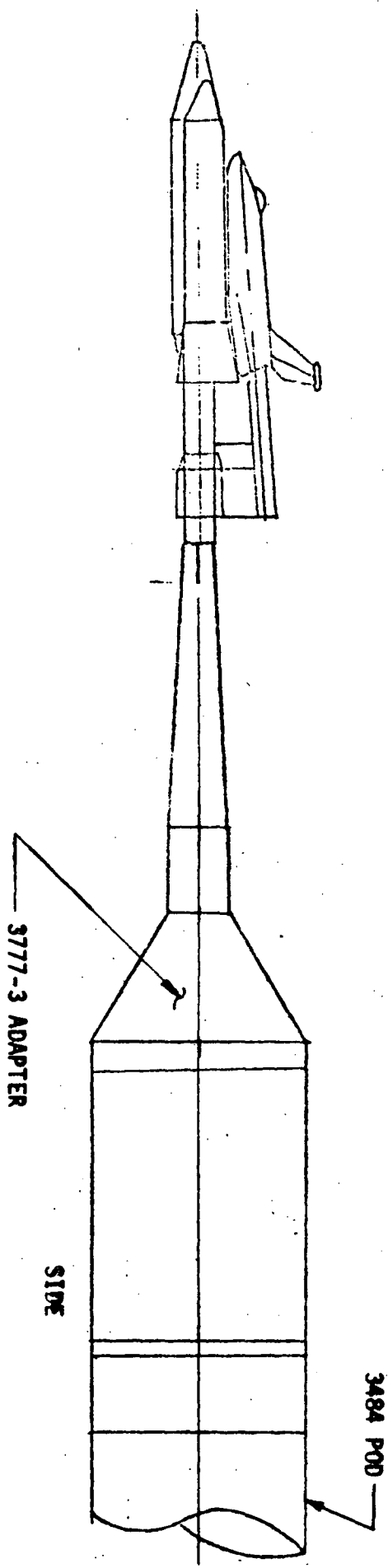
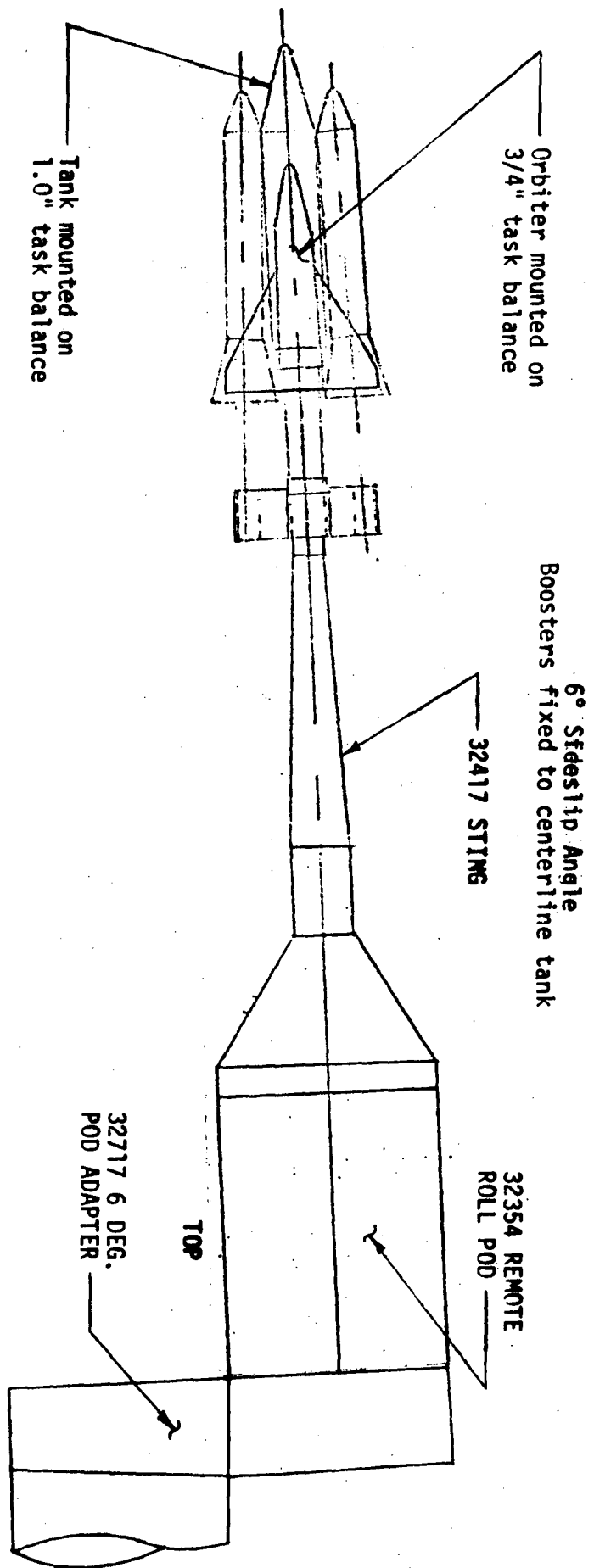


Figure 52. Tunnel Installation for the OBT Configuration With 6° Sideslip Angle-Pitch Series (Boosters Fixed to Centerline Tank)

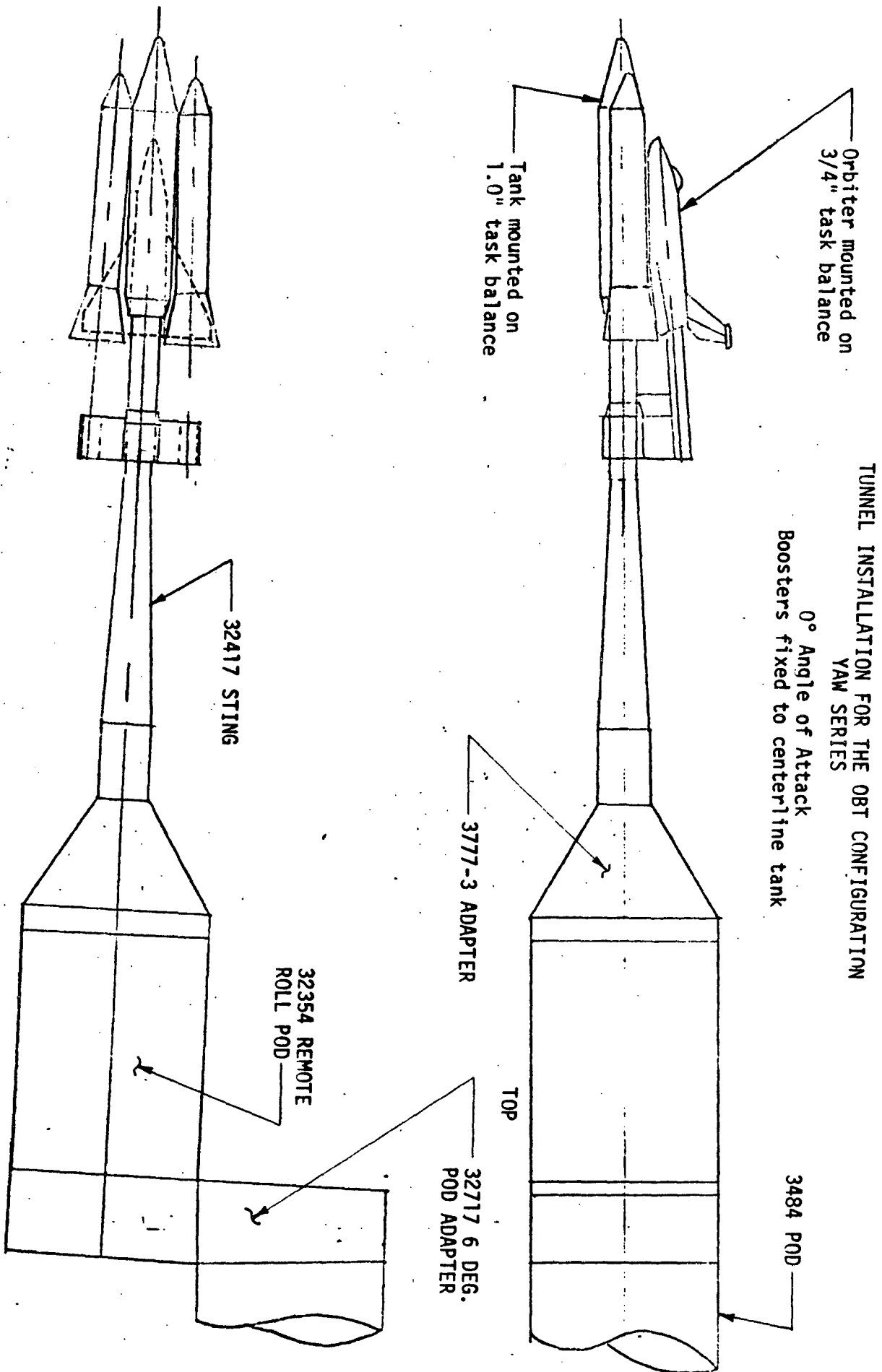


Figure 53. Tunnel Installation for the OBT Configuration With 0° Angle of Attack-  
Yaw Series (Boosters Fixed to Centerline Tank)

# TUNNEL INSTALLATION FOR THE OBT CONFIGURATION YAW SERIES

6° Angle of Attack  
Boosters fixed to centerline tank

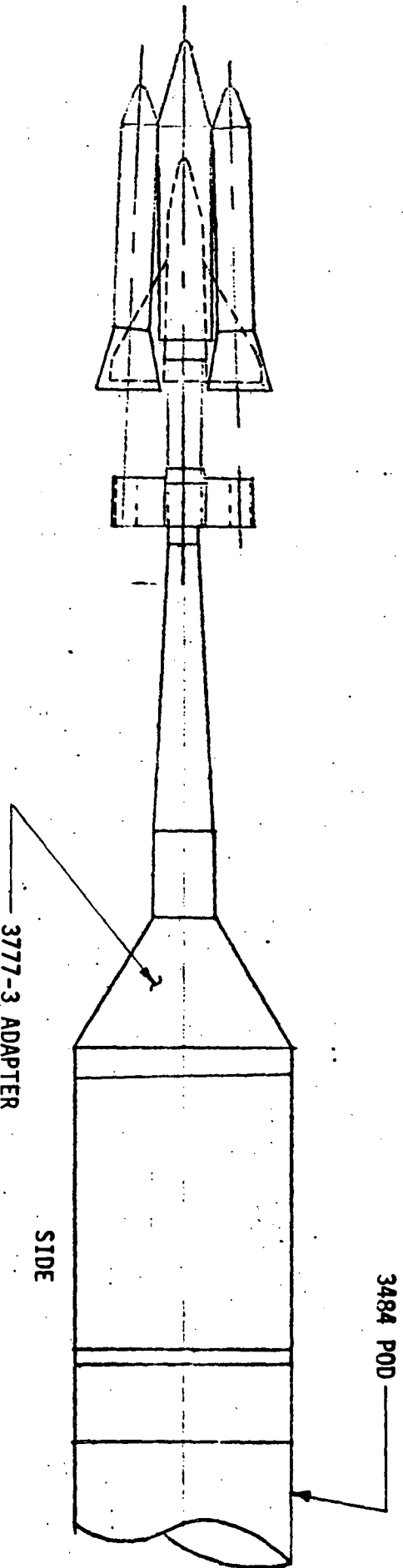
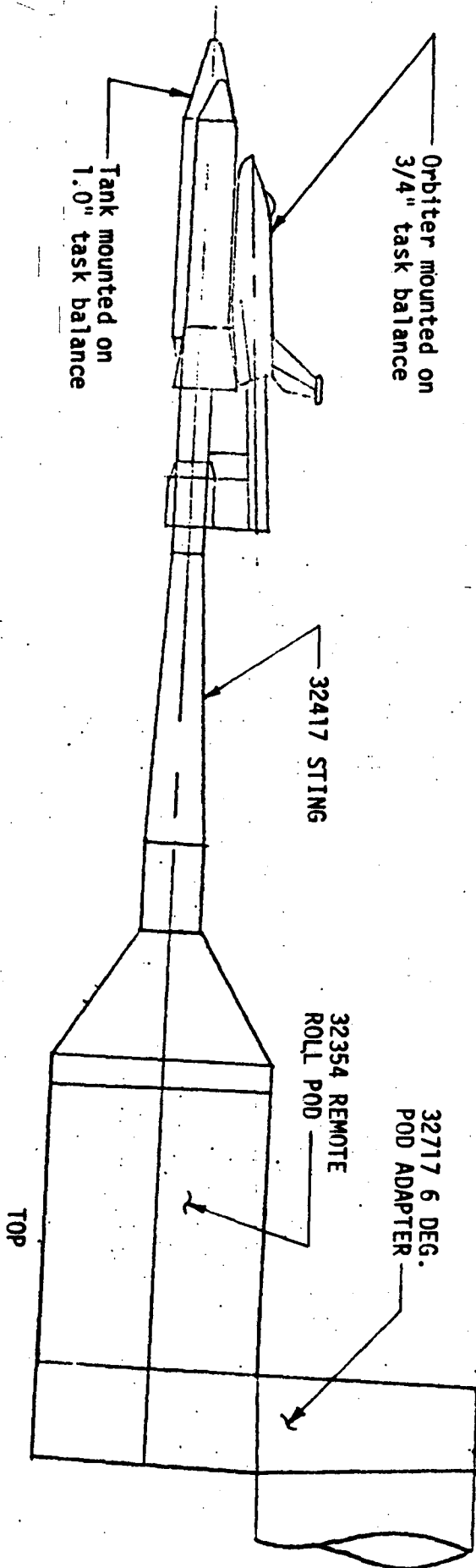


Figure 54. Tunnel Installation for the OBT Configuration With 6° Angle of Attack-  
Yaw Series (Boosters Fixed to the Centerline Tank)

TUNNEL INSTALLATION FOR THE OBT CONFIGURATION  
PITCH SERIES  
Orbiter alone

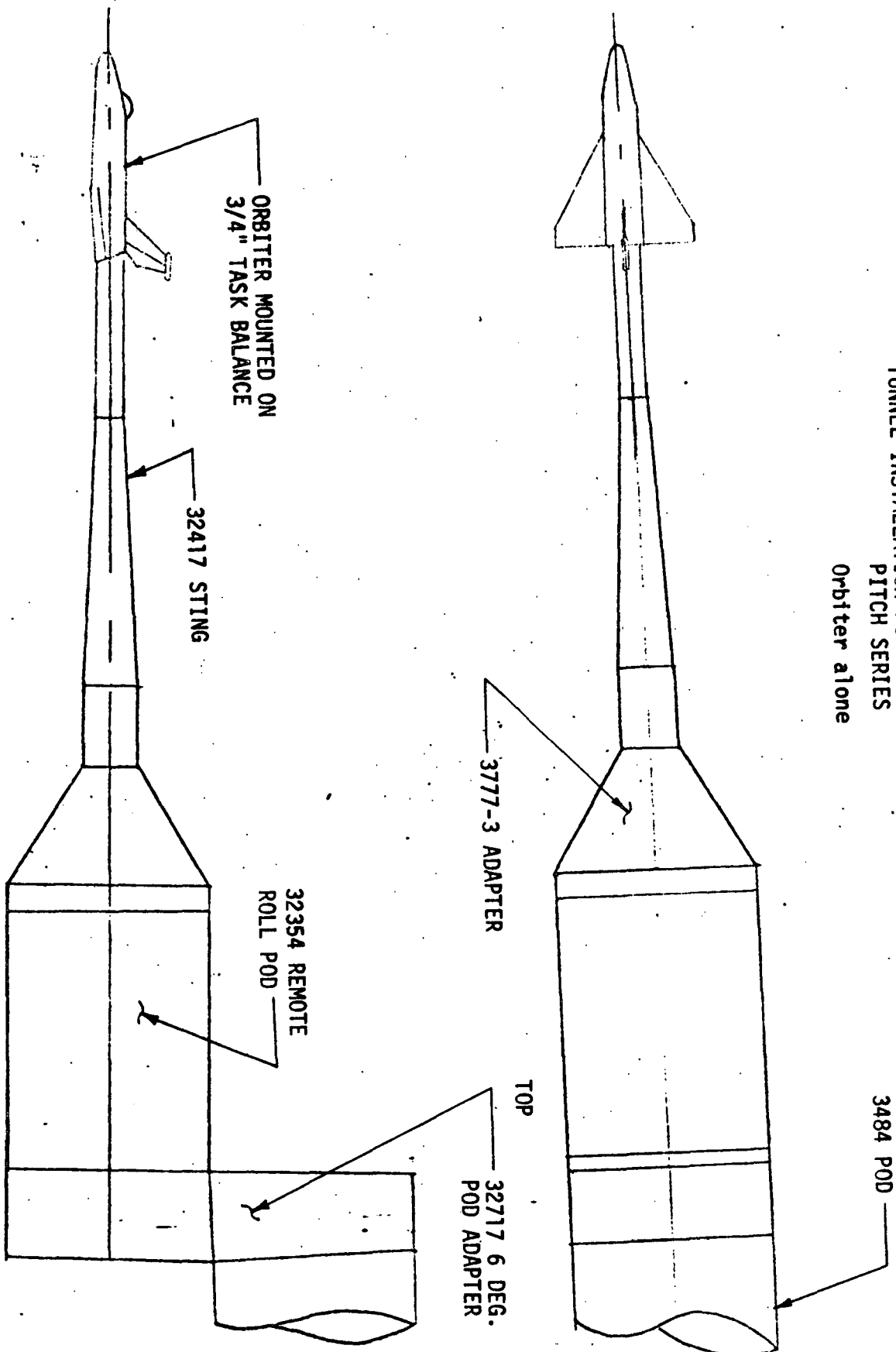


Figure 55. Tunnel Installation for the Orbiter Alone Configuration

TUNNEL INSTALLATION FOR THE OBT CONFIGURATION  
PITCH SERIES

Centerline tank alone.

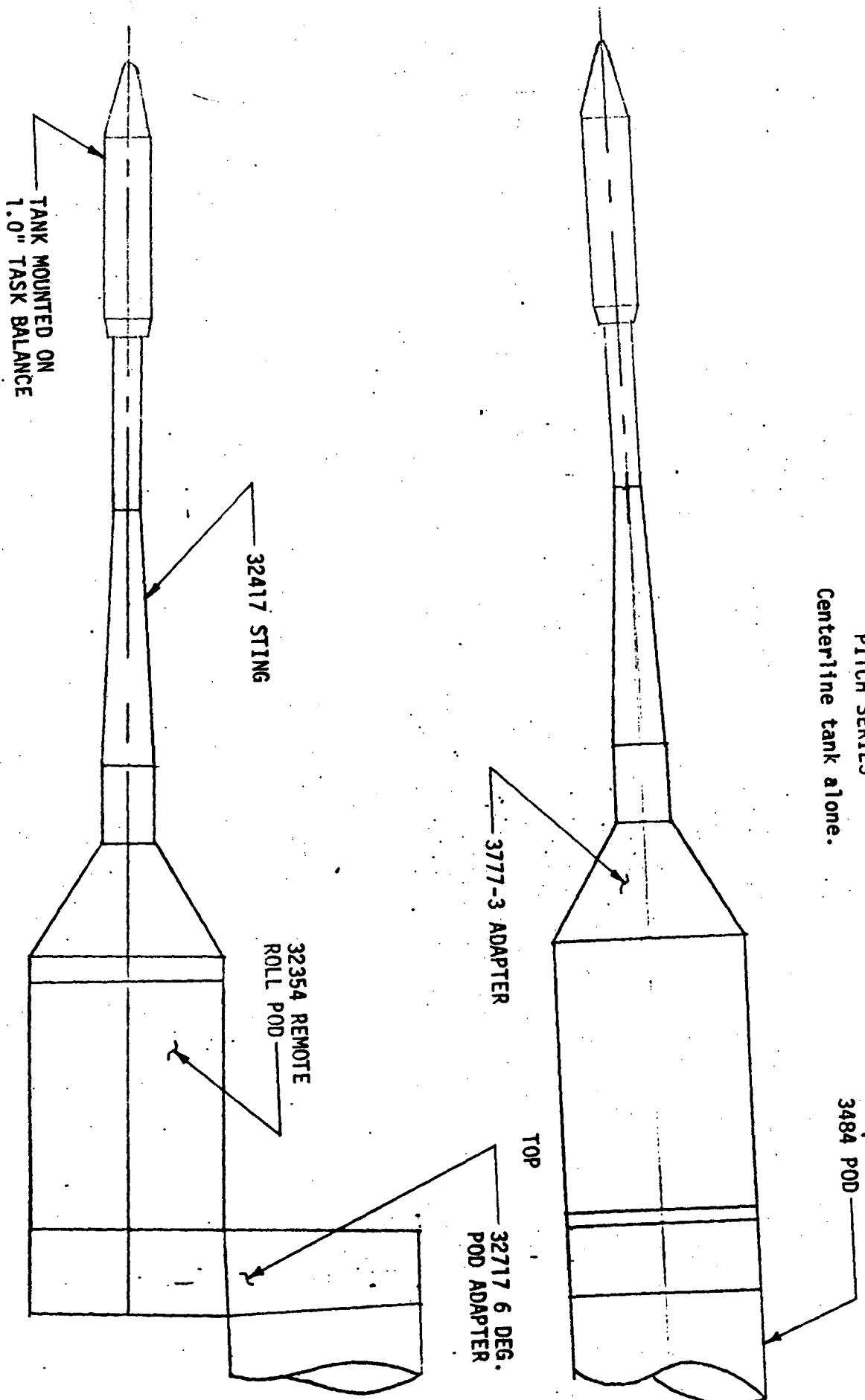


Figure 56. Tunnel Installation for the Tank Alone Configuration



# TUNNEL INSTALLATION FOR THE OBT CONFIGURATION PITCH SERIES

Booster alone

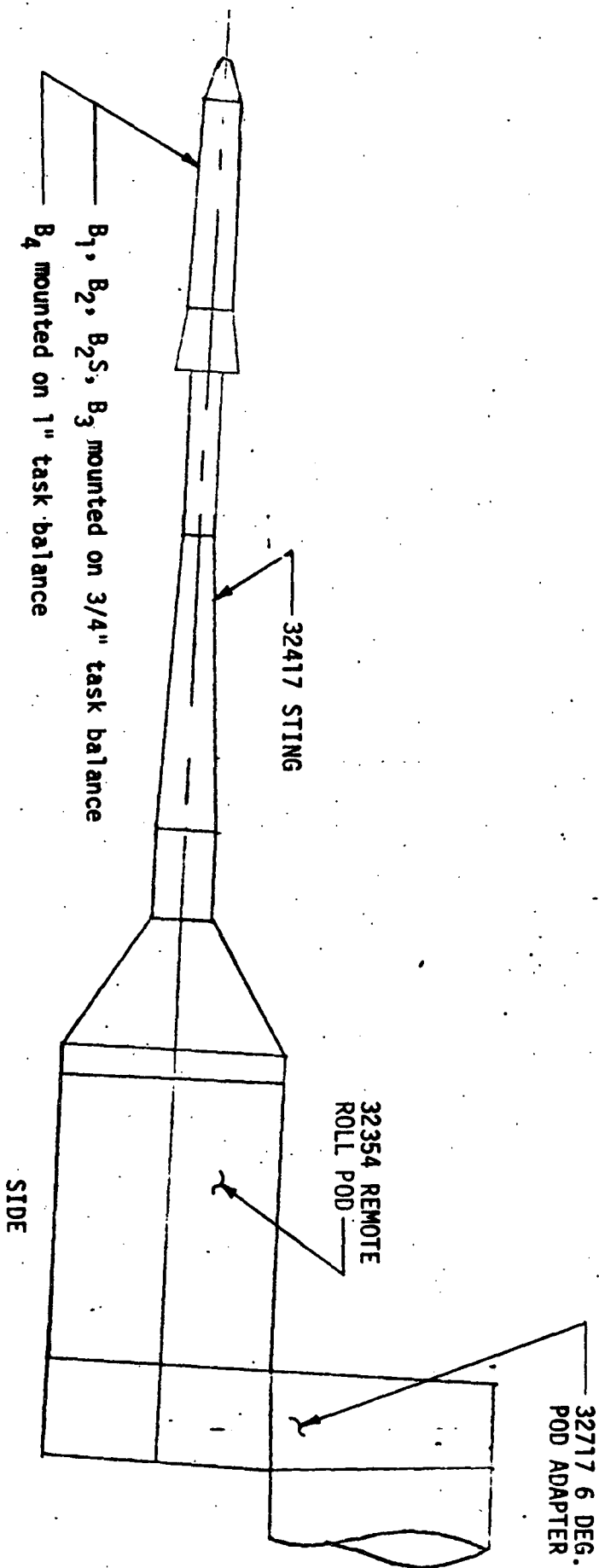
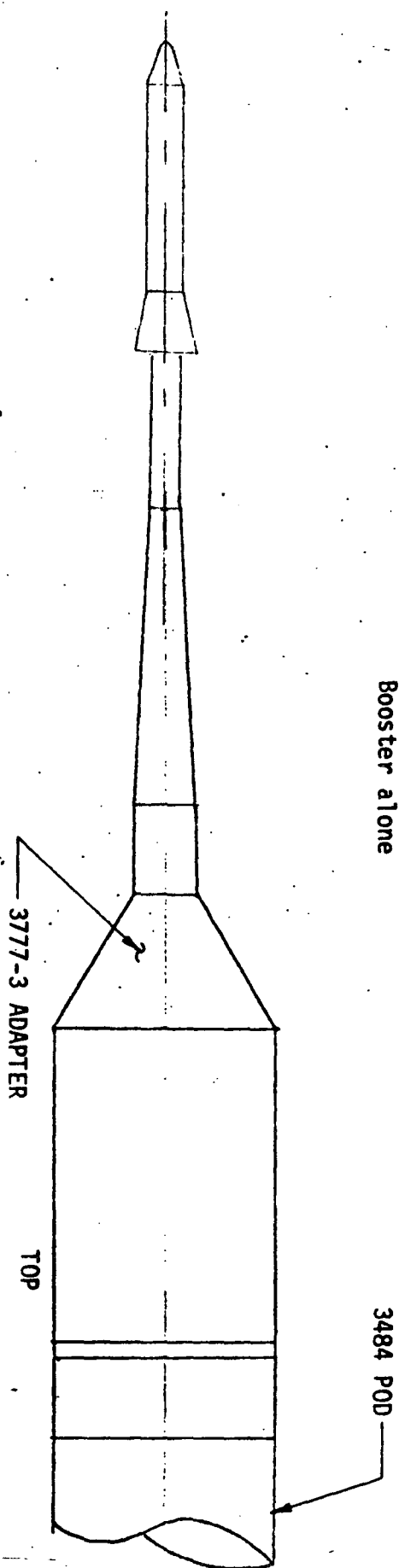


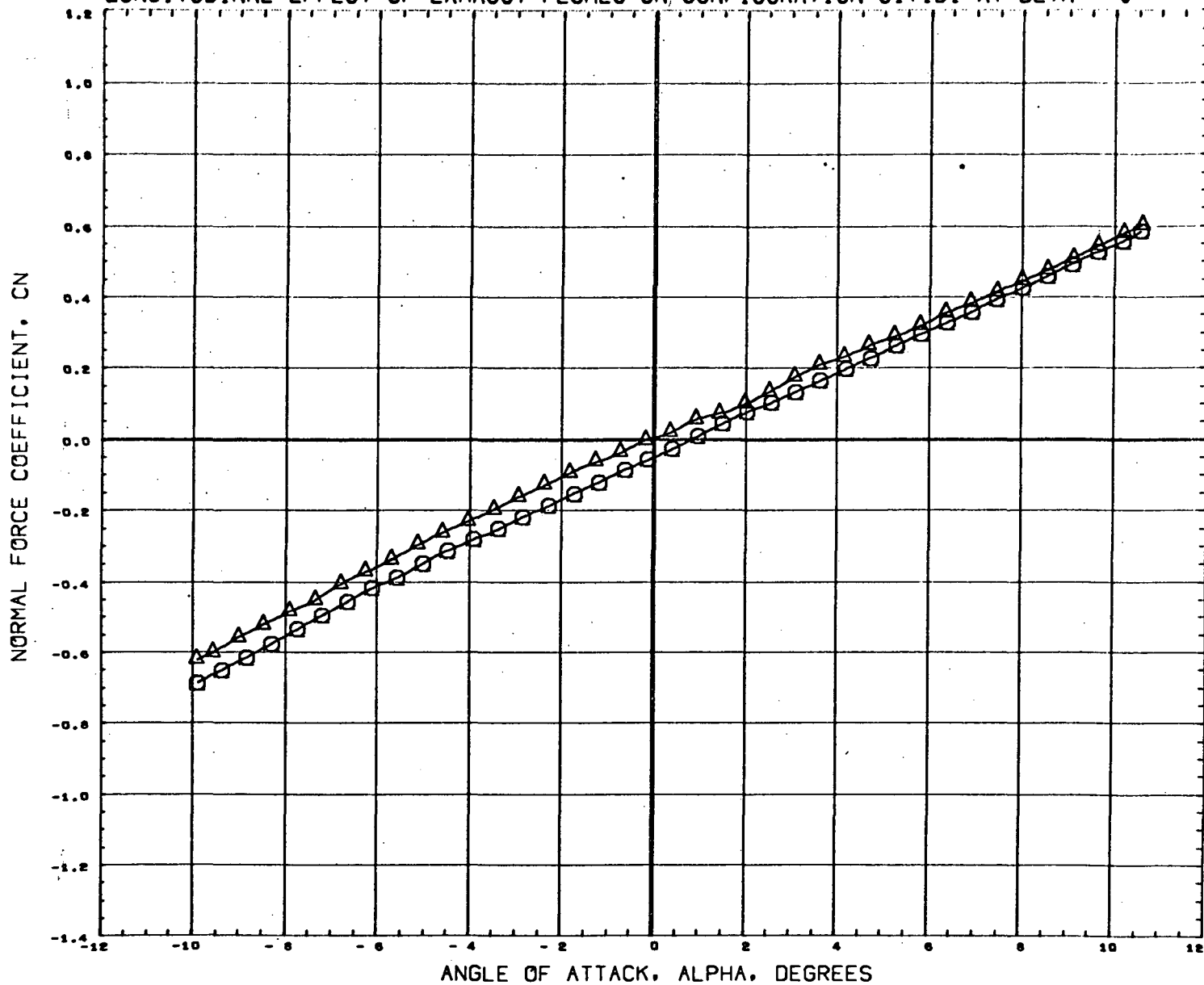
Figure 57. Tunnel Installation for the Booster Alone Configuration

## DATA    FIGURES

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Tabulations of the plotted data and corresponding  
source data are available from SADSAC Operations.

# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 0

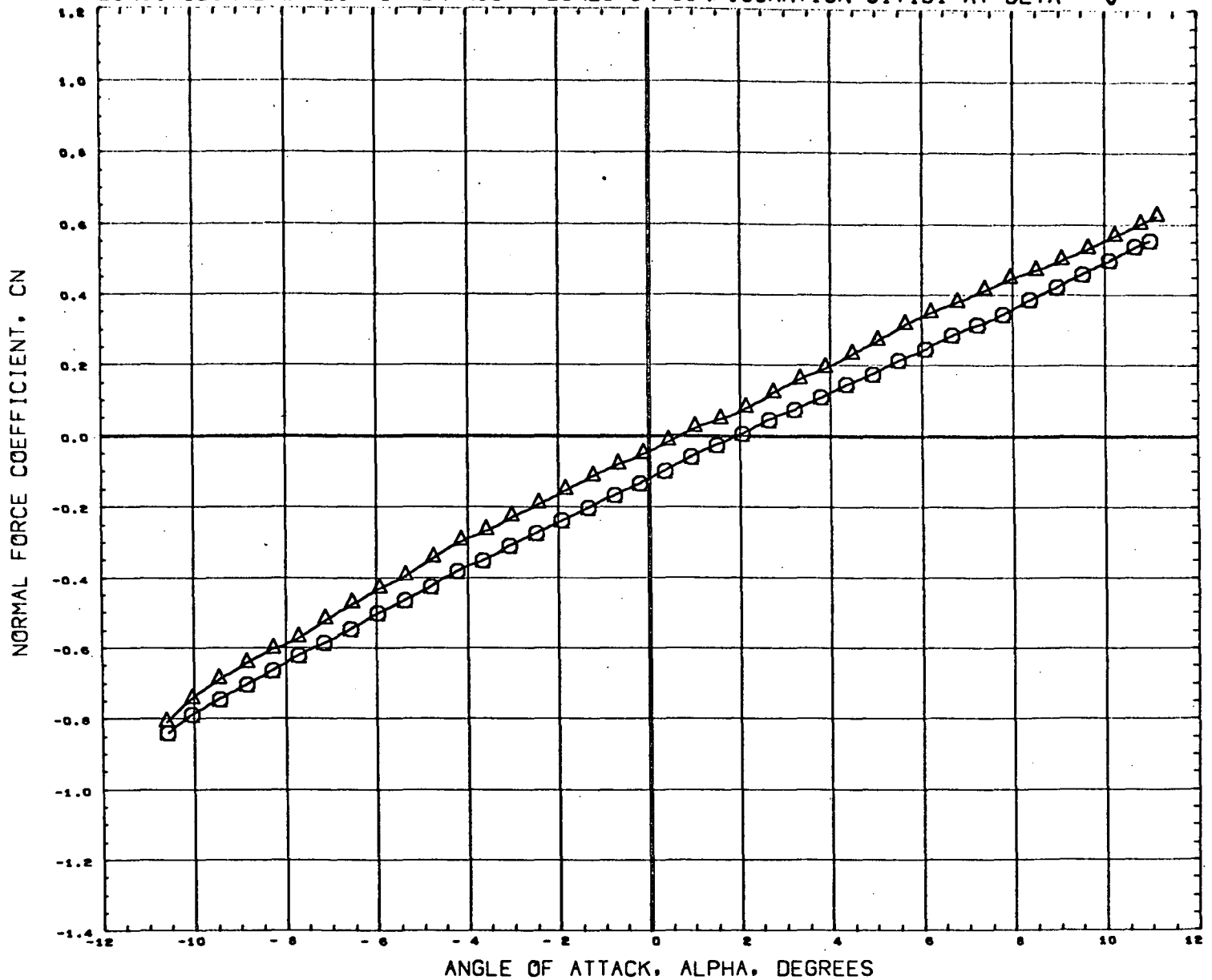


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(CD7507)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
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MACH 2.20

PAGE 1

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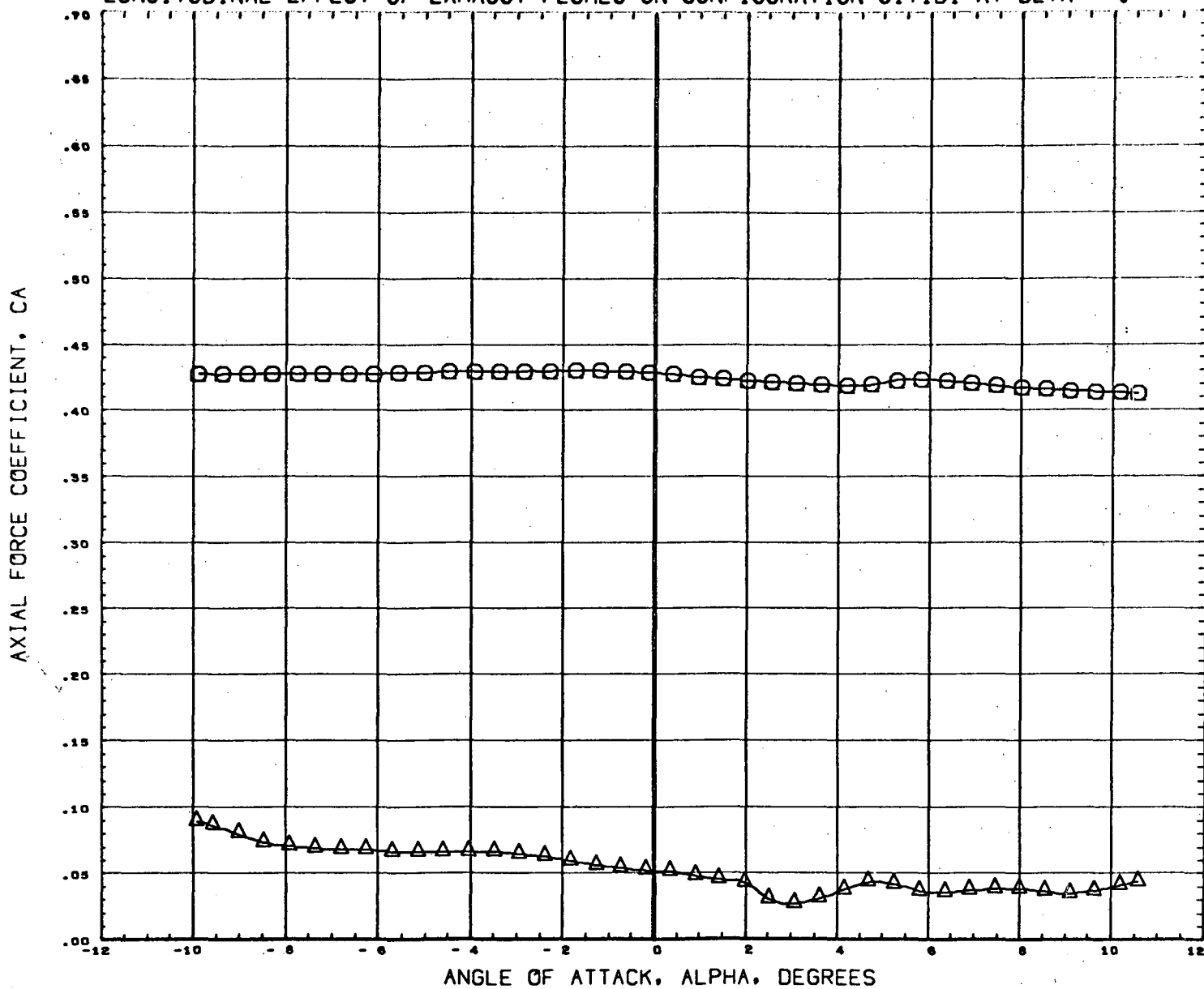


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(CD7501)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7507)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
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MACH 2.25

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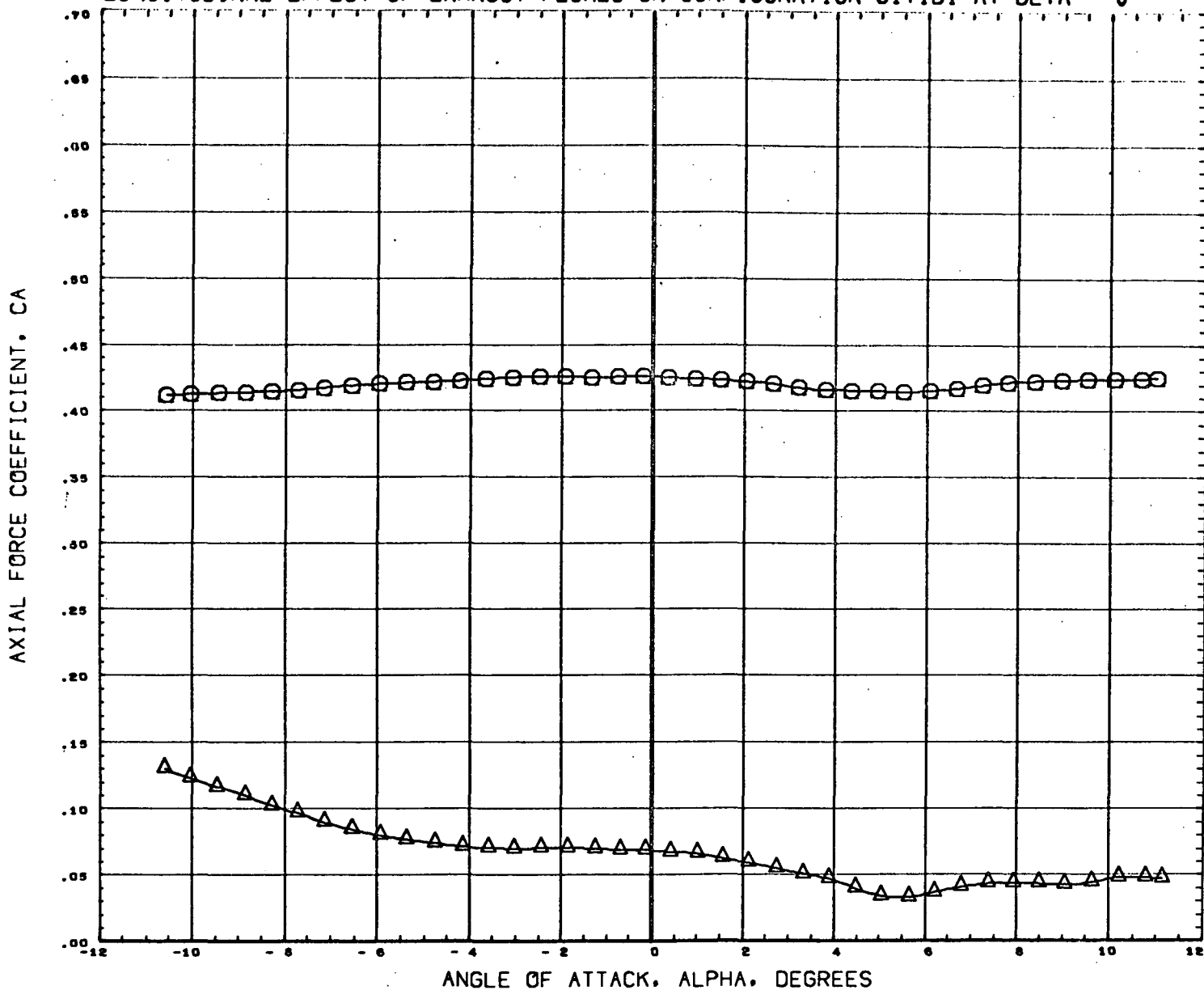


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(CD7507)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
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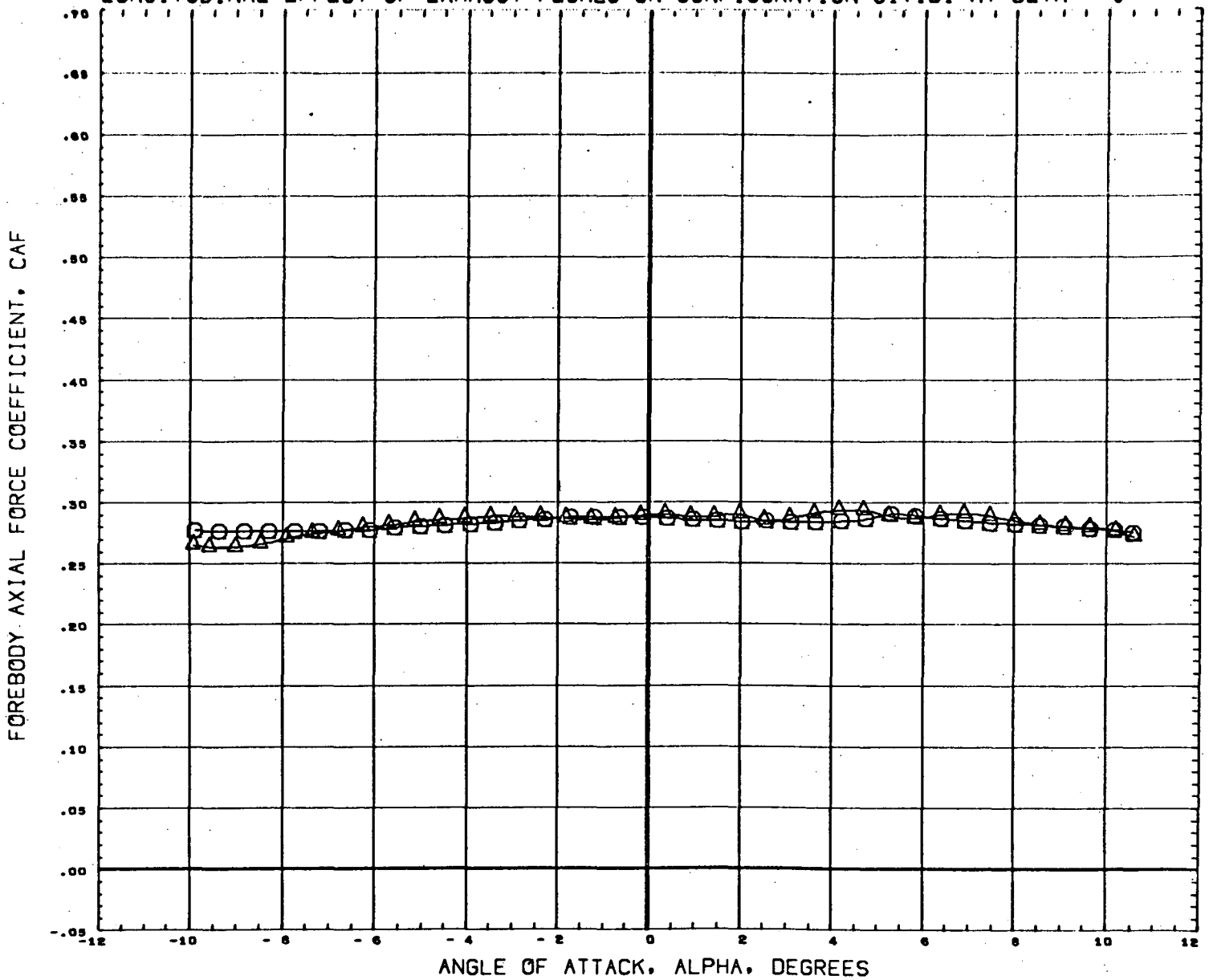


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MACH 2.25

PAGE 4

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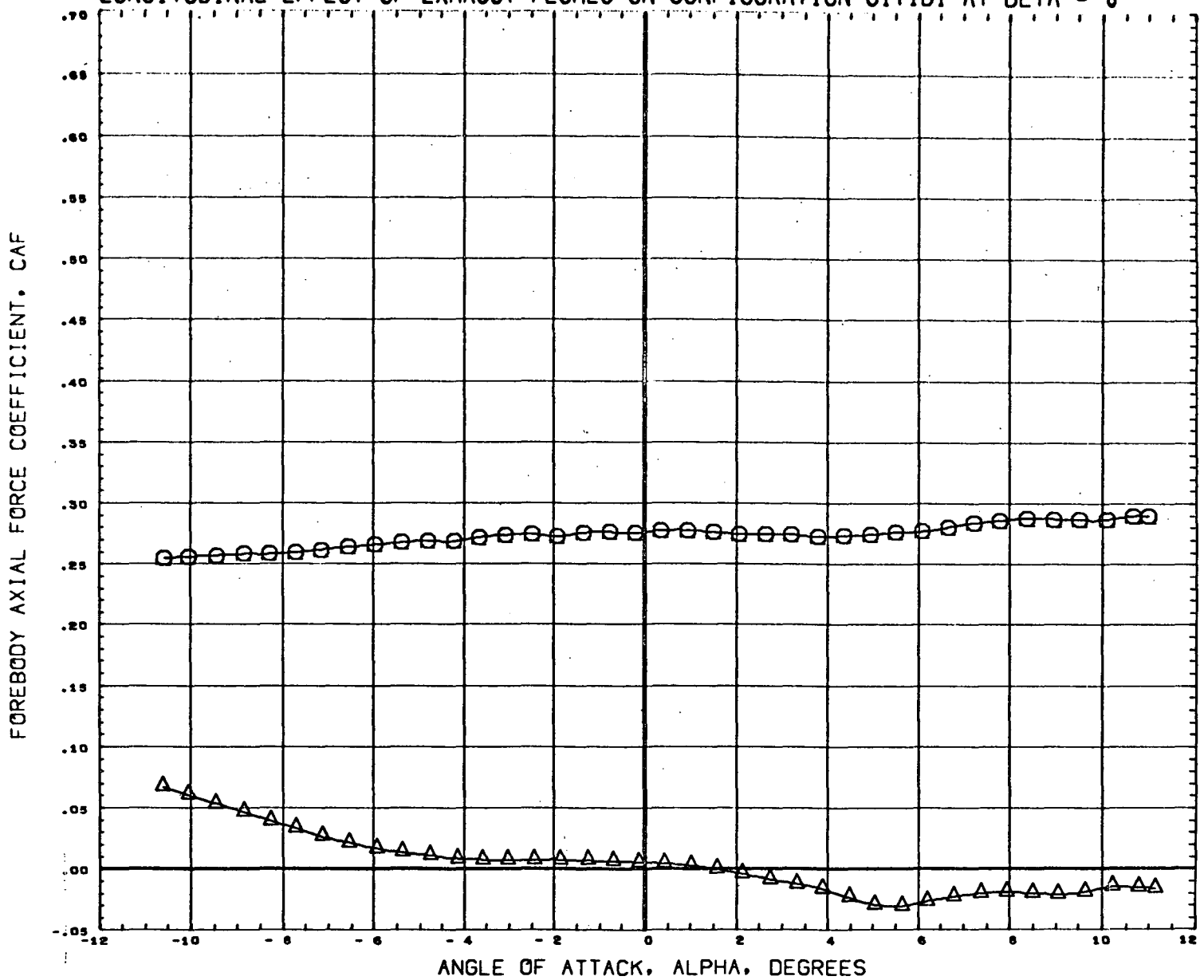


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MACH 2.20

PAGE 5

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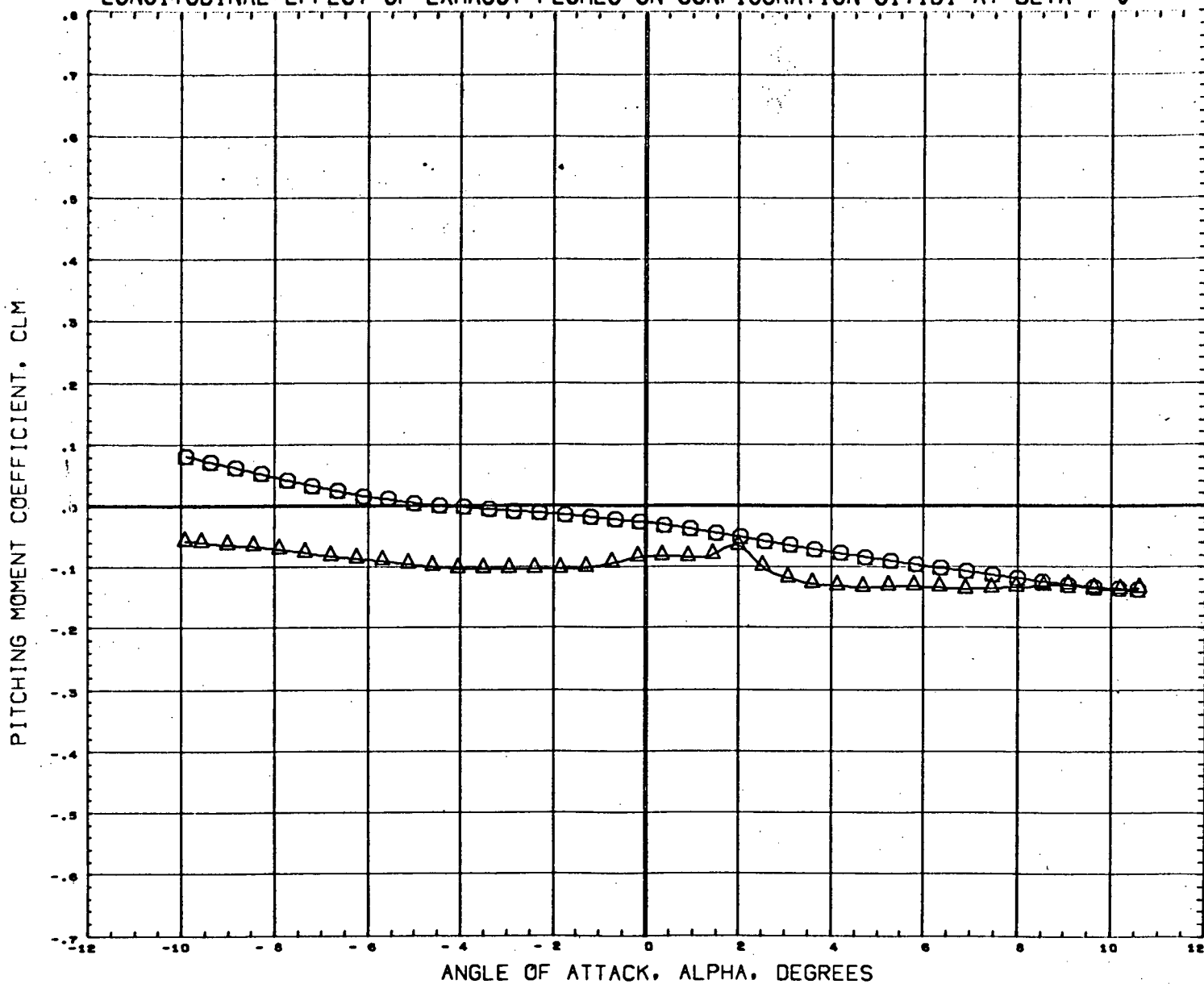
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(CD7507)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
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MACH 2.25

PAGE 6



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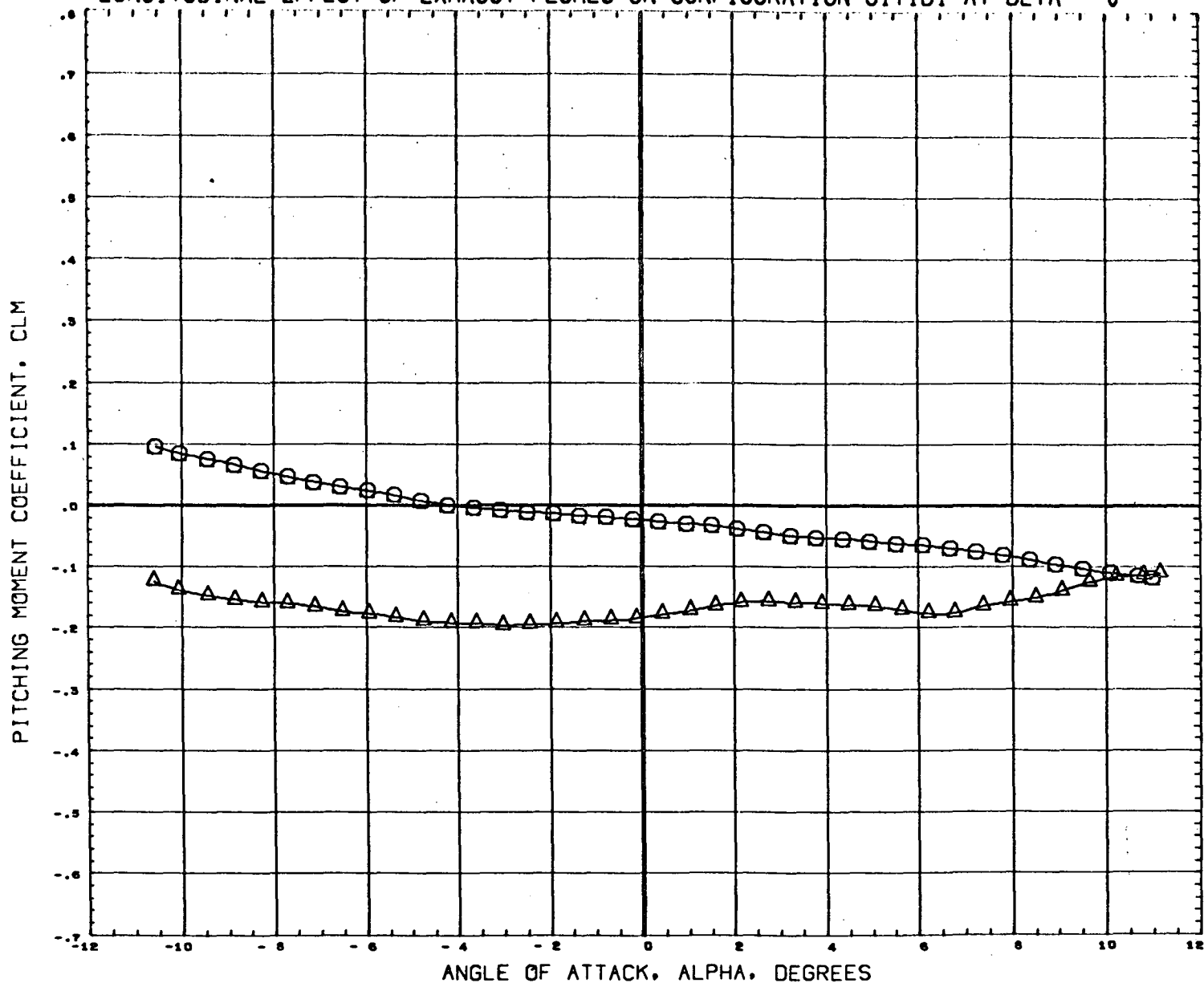


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(CD7507)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
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MACH 2.20

PAGE 7

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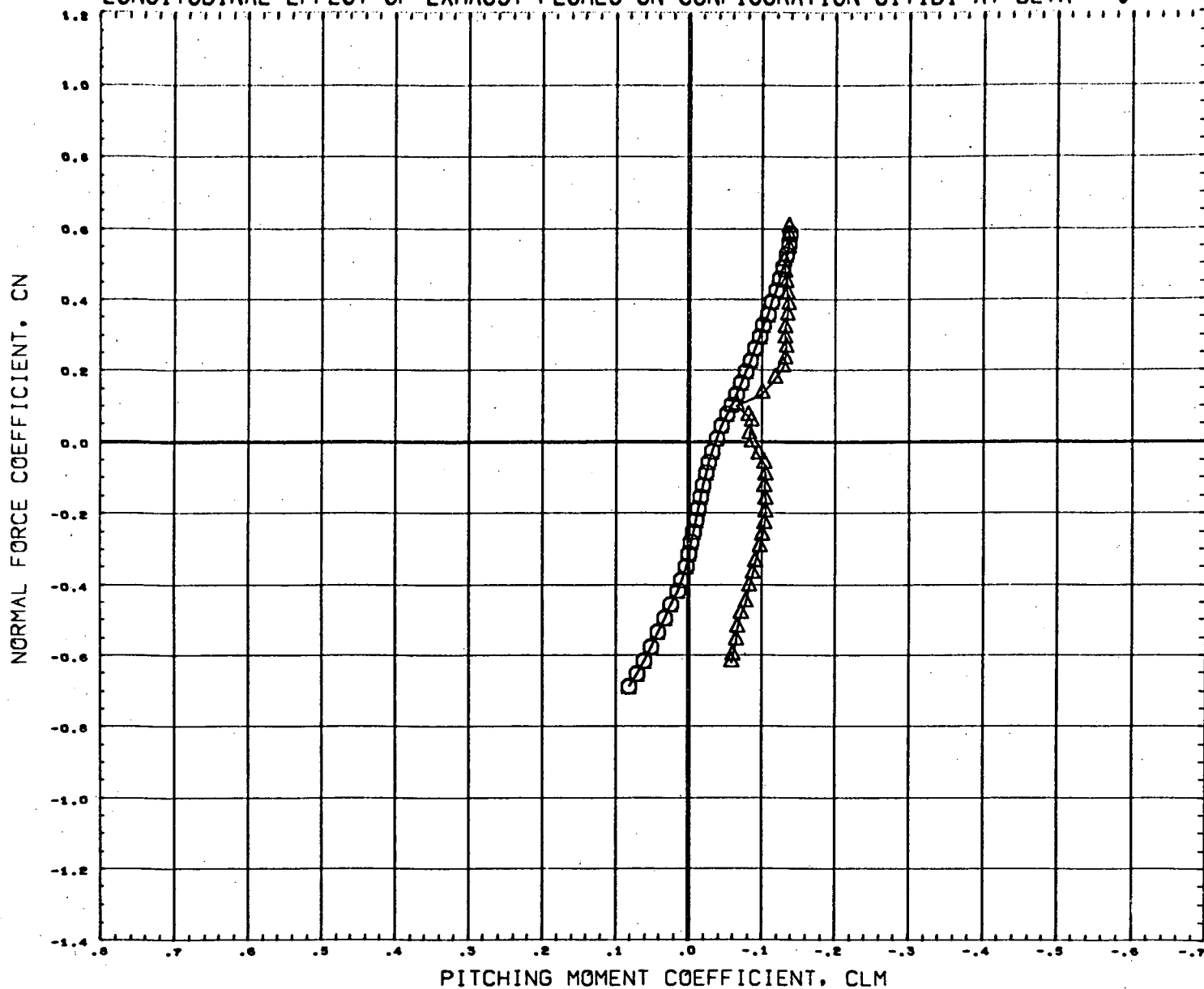


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(CD7507)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
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						YMRP	0.0000 IN.
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MACH 2.25

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(CD7507)    △    MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)

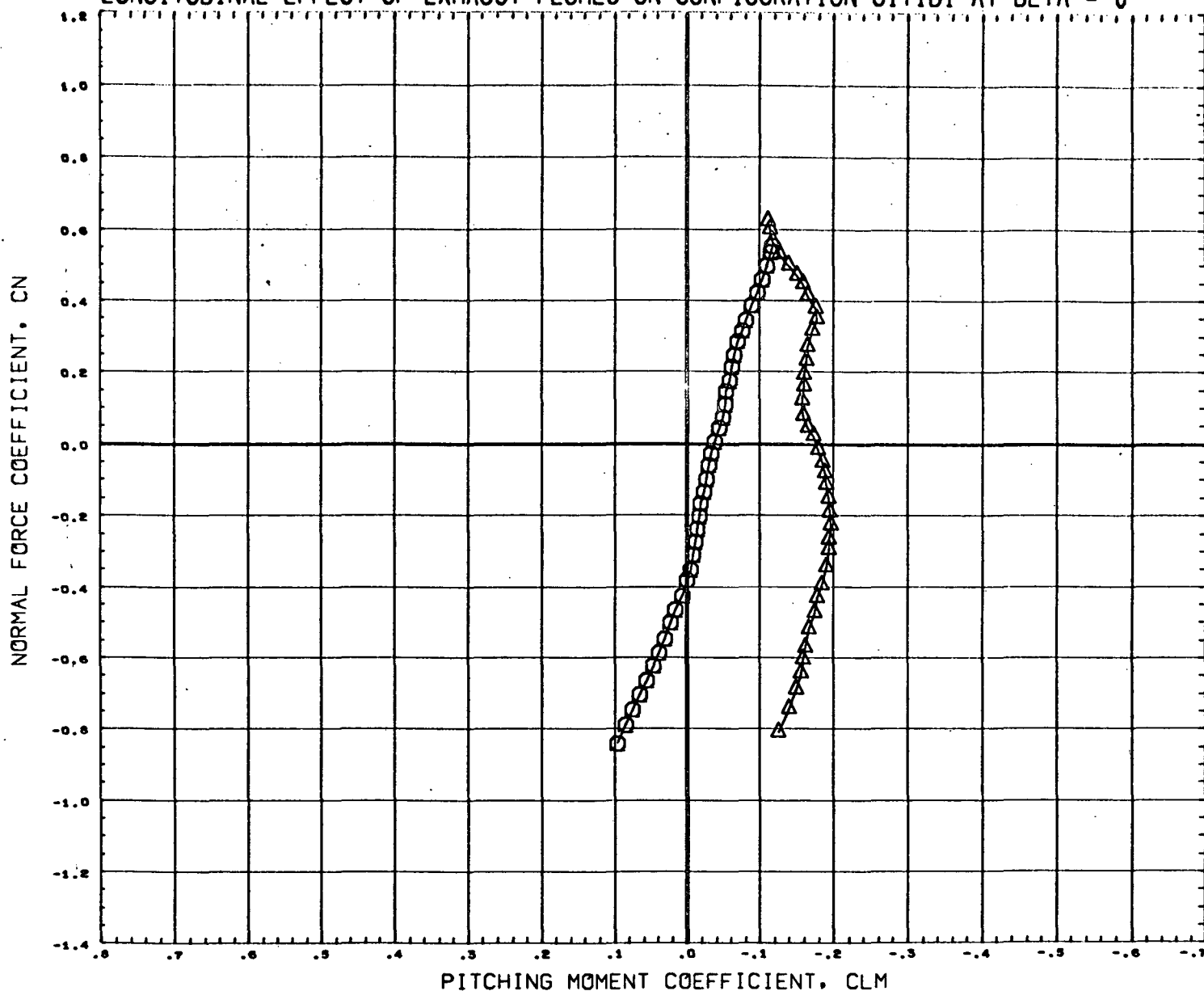
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0.000    0.000    0.000    0.000

REFERENCE INFORMATION  
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MACH    2.20

PAGE    9

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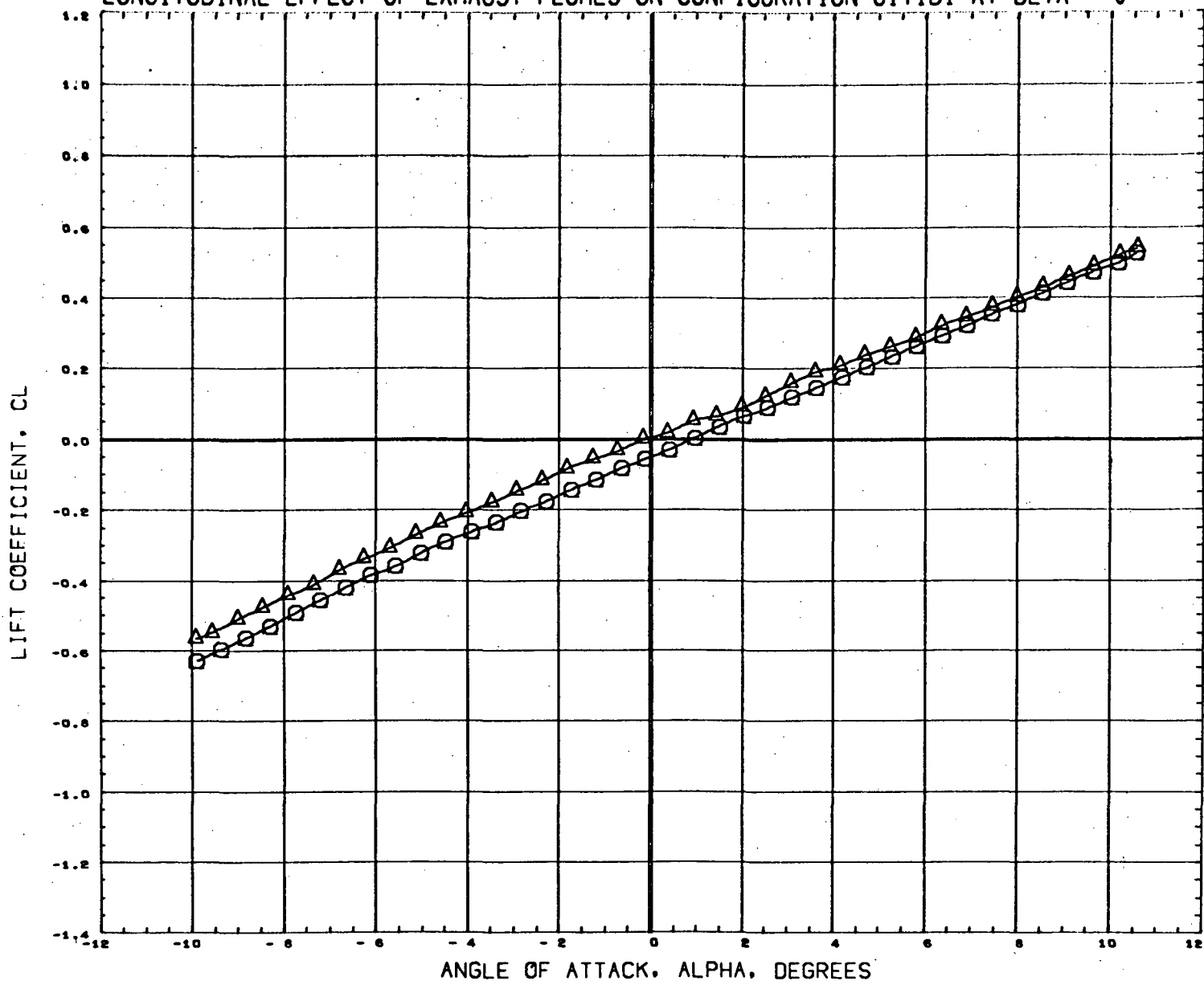


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(CD7507)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
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MACH 2.25

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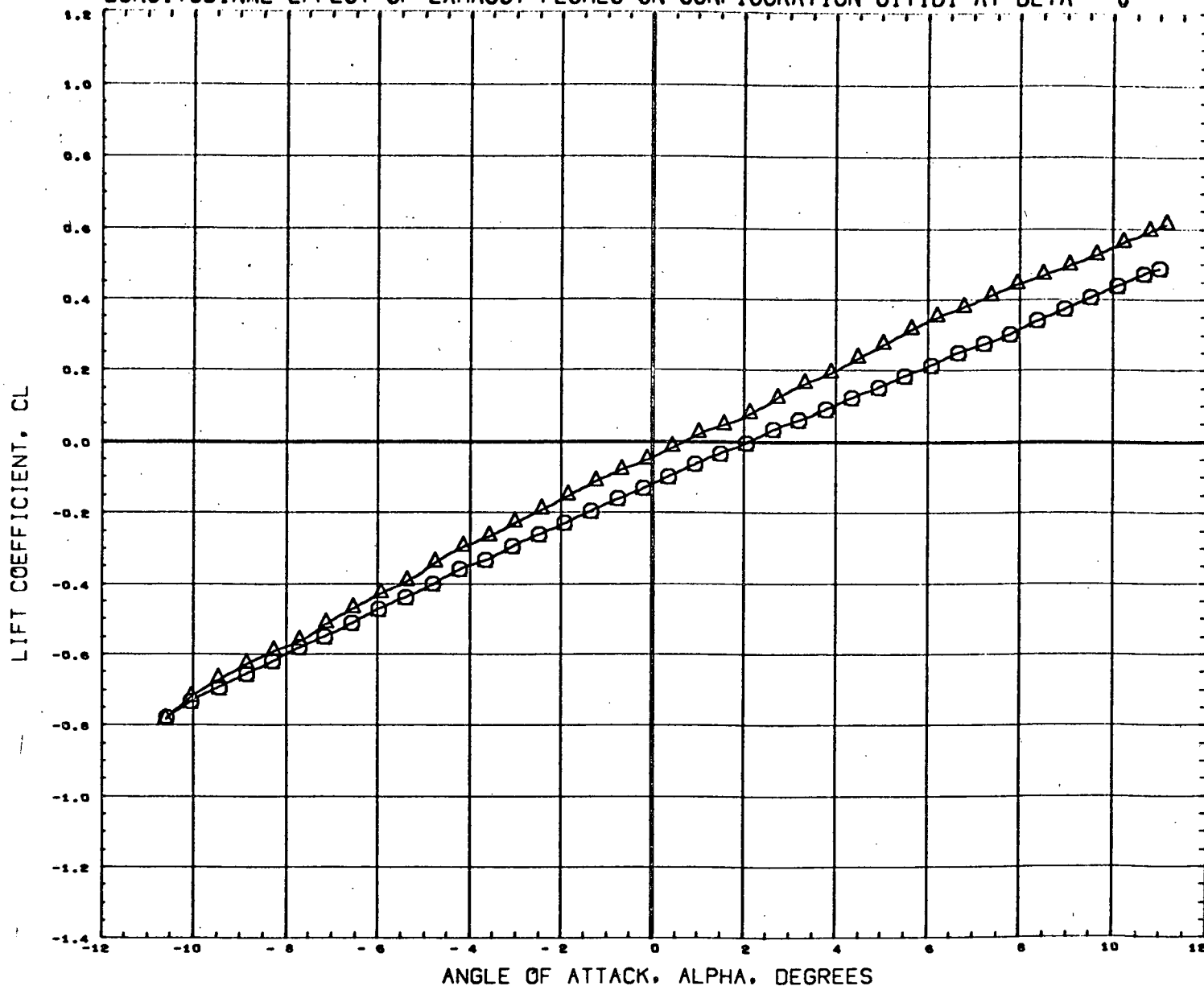


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						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
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MACH 2.20

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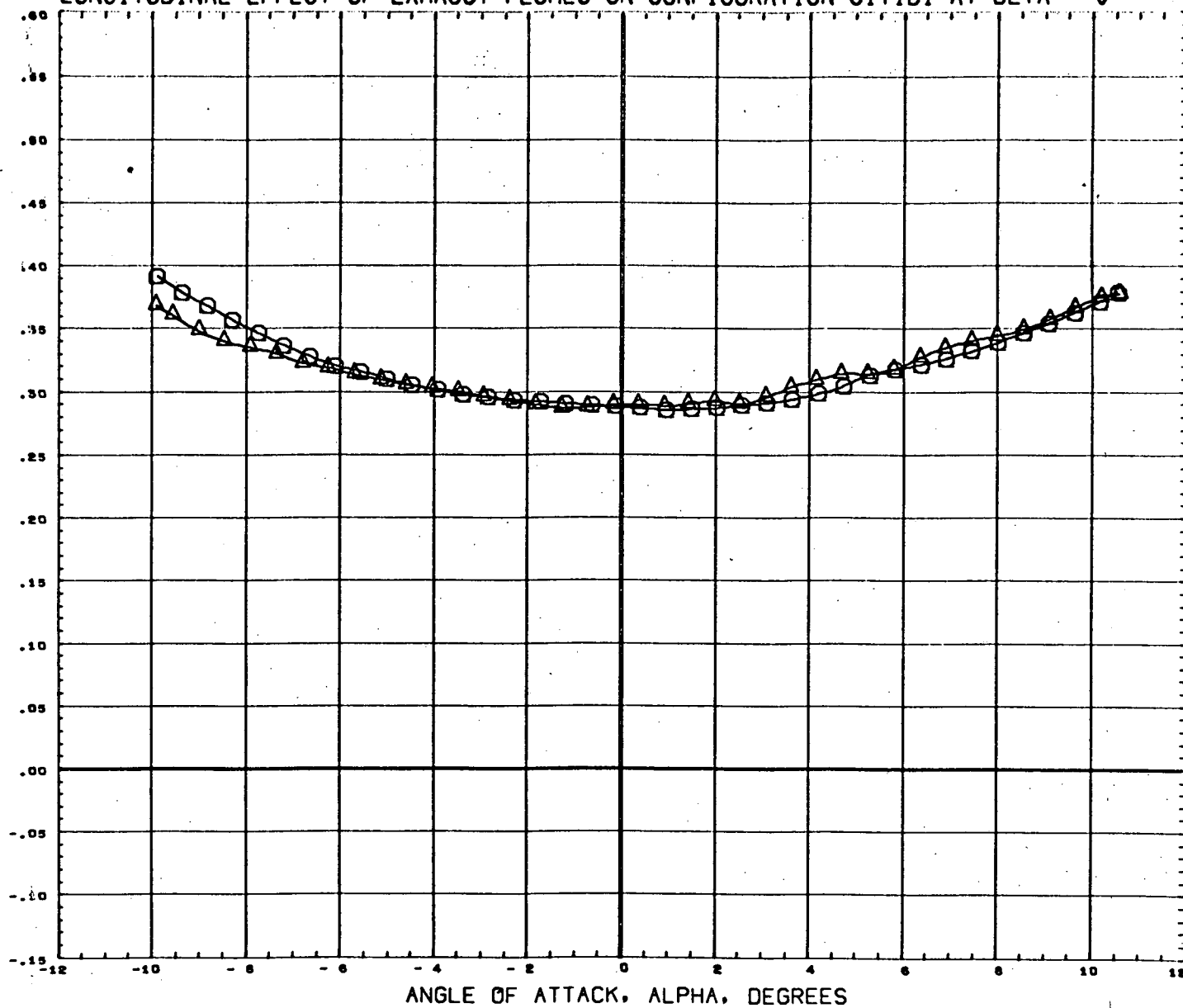
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(CD7507)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
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						XMRF	557.0004 IN.
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						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.25

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FOREBODY DRAG COEFFICIENT, CDF



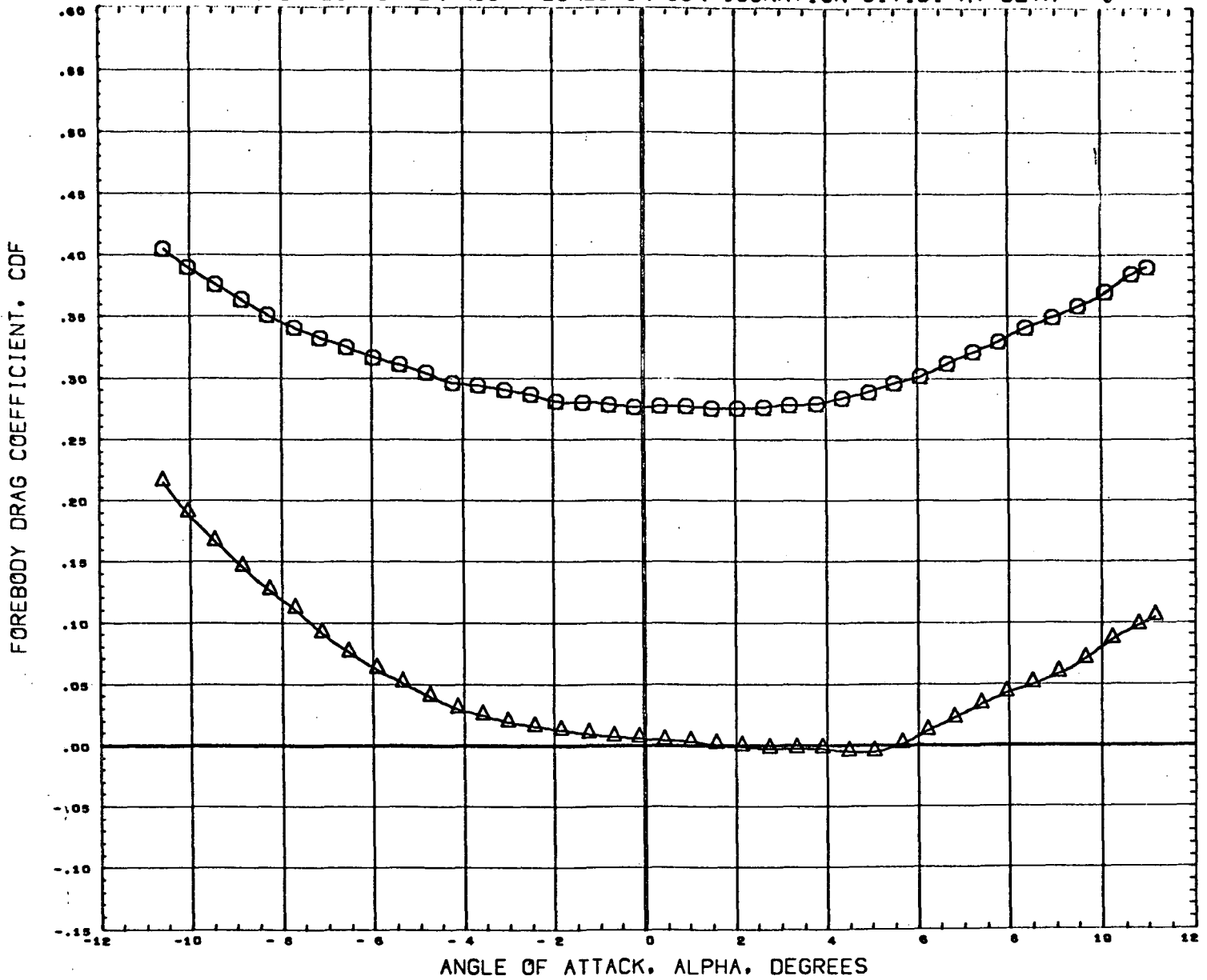
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BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
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0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
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MACH 2.20

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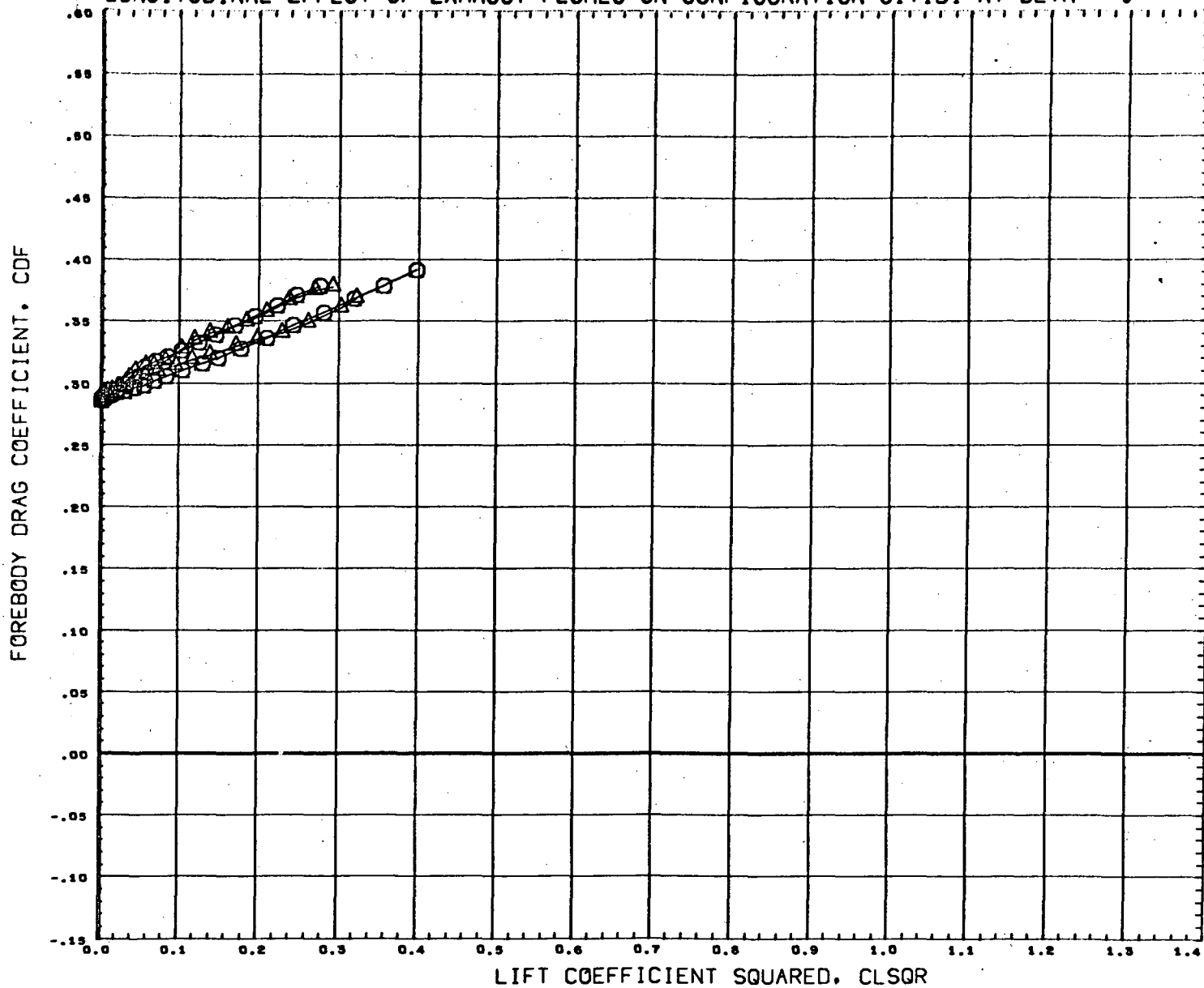
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(CD7507)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
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						YMRP	0.0000 IN.
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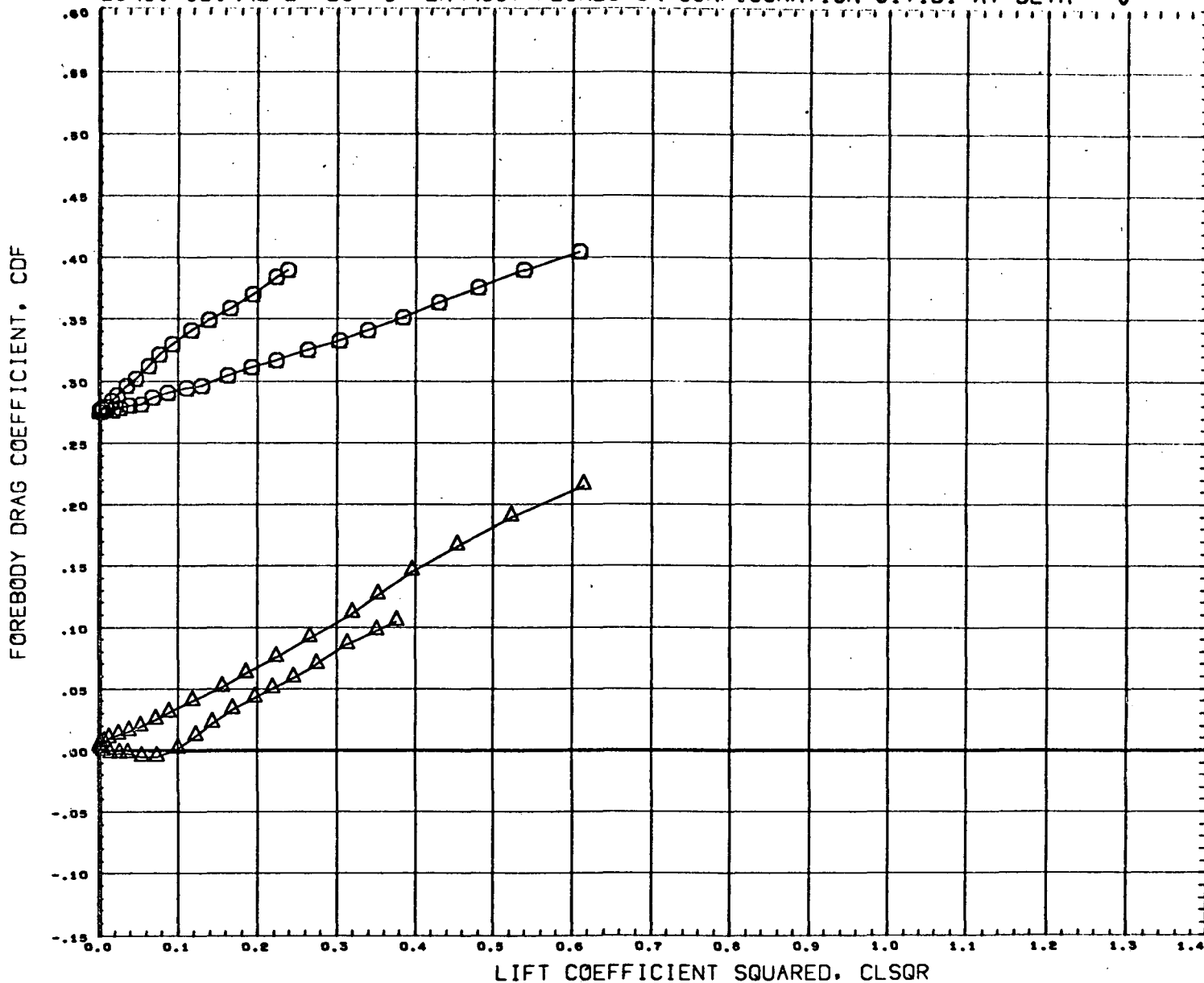


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(CD7507)	MDAC S-222 COMPOSITE(T-C6) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
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MACH 2.20

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 0



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(CD7507)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)

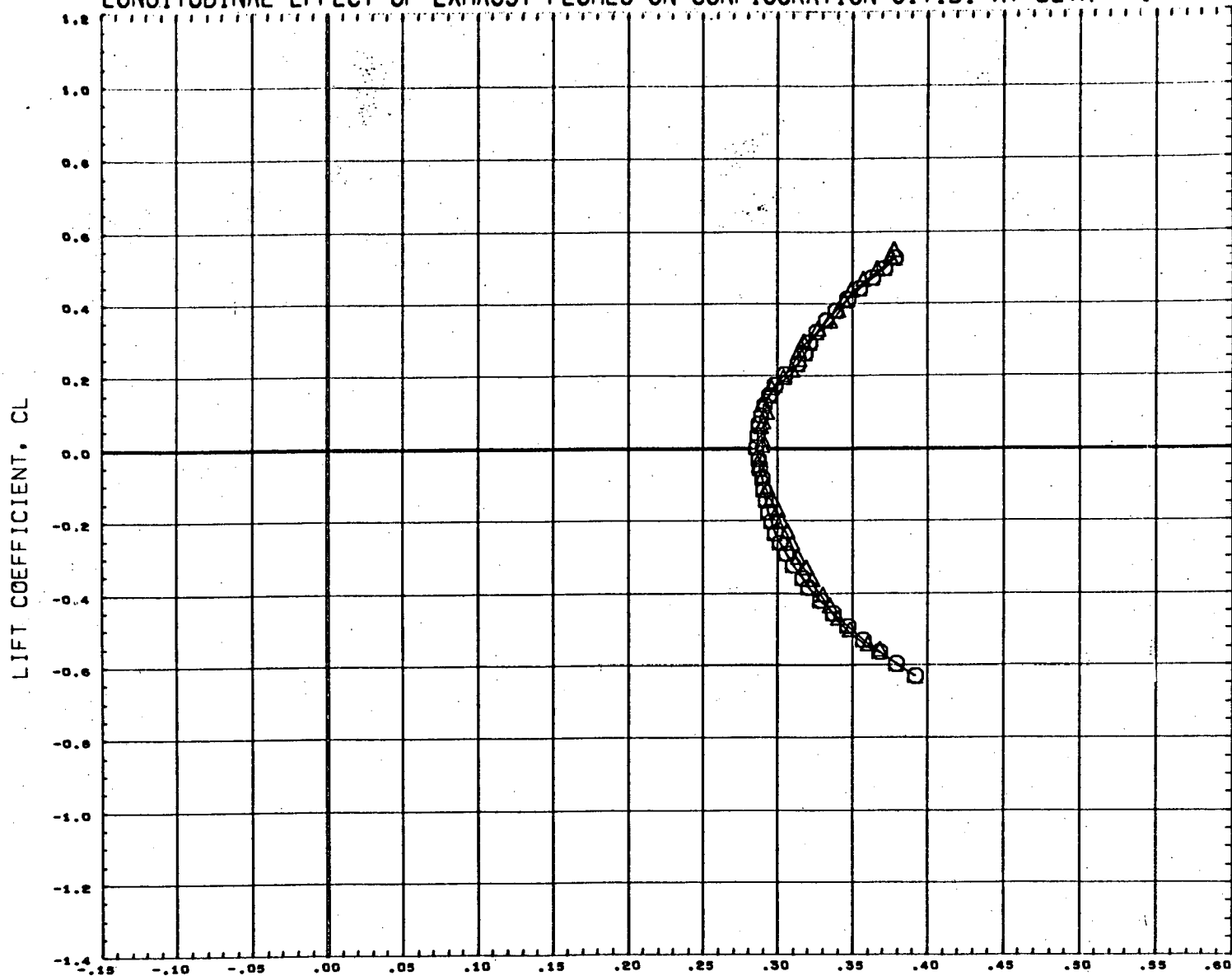
BETA	ELEVTR	AILRON	RUDDER
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0.000	0.000	0.000	0.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

MACH 2.25

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 0



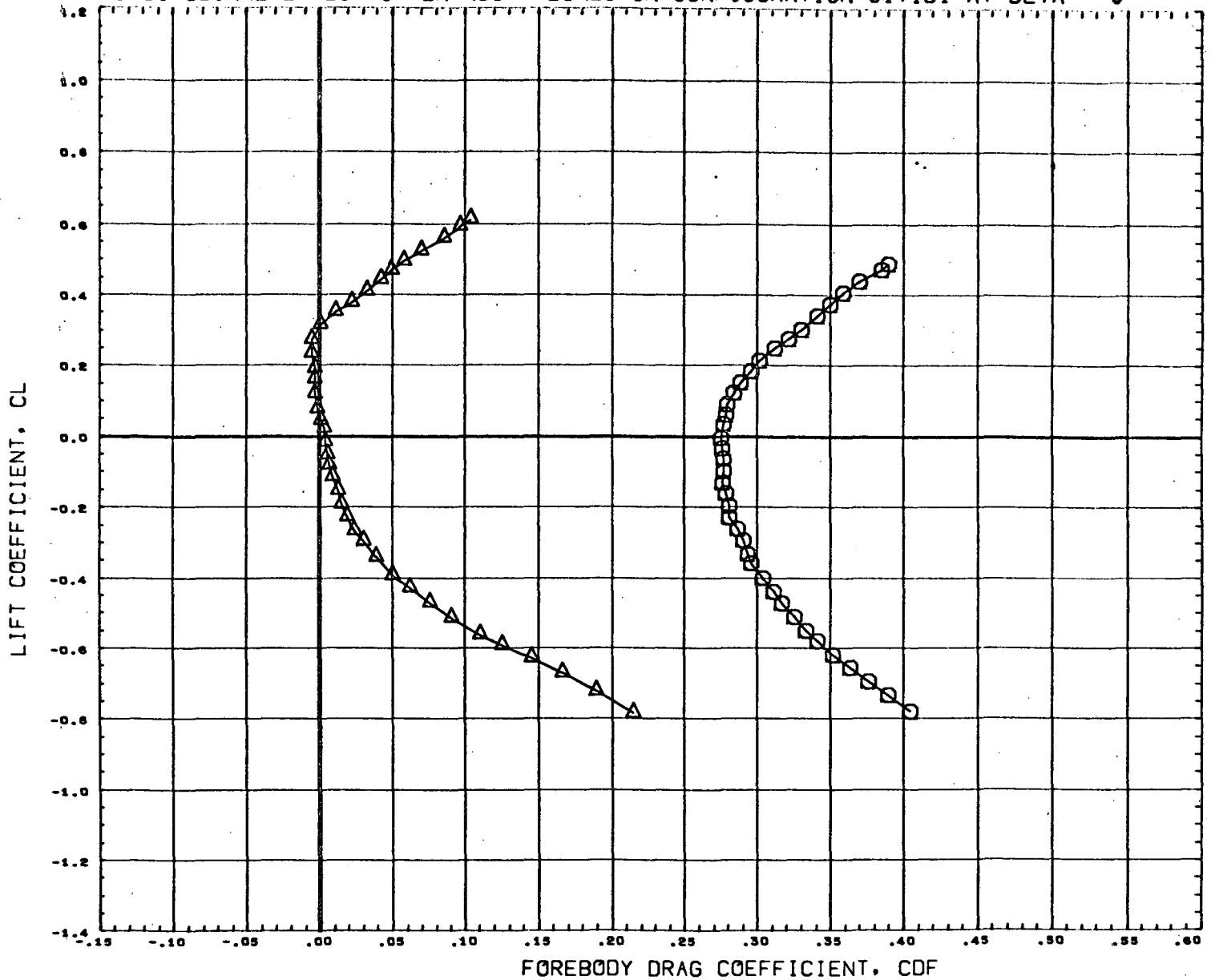
FOREBODY DRAG COEFFICIENT, CDF

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(CD7507)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
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MACH 2.20

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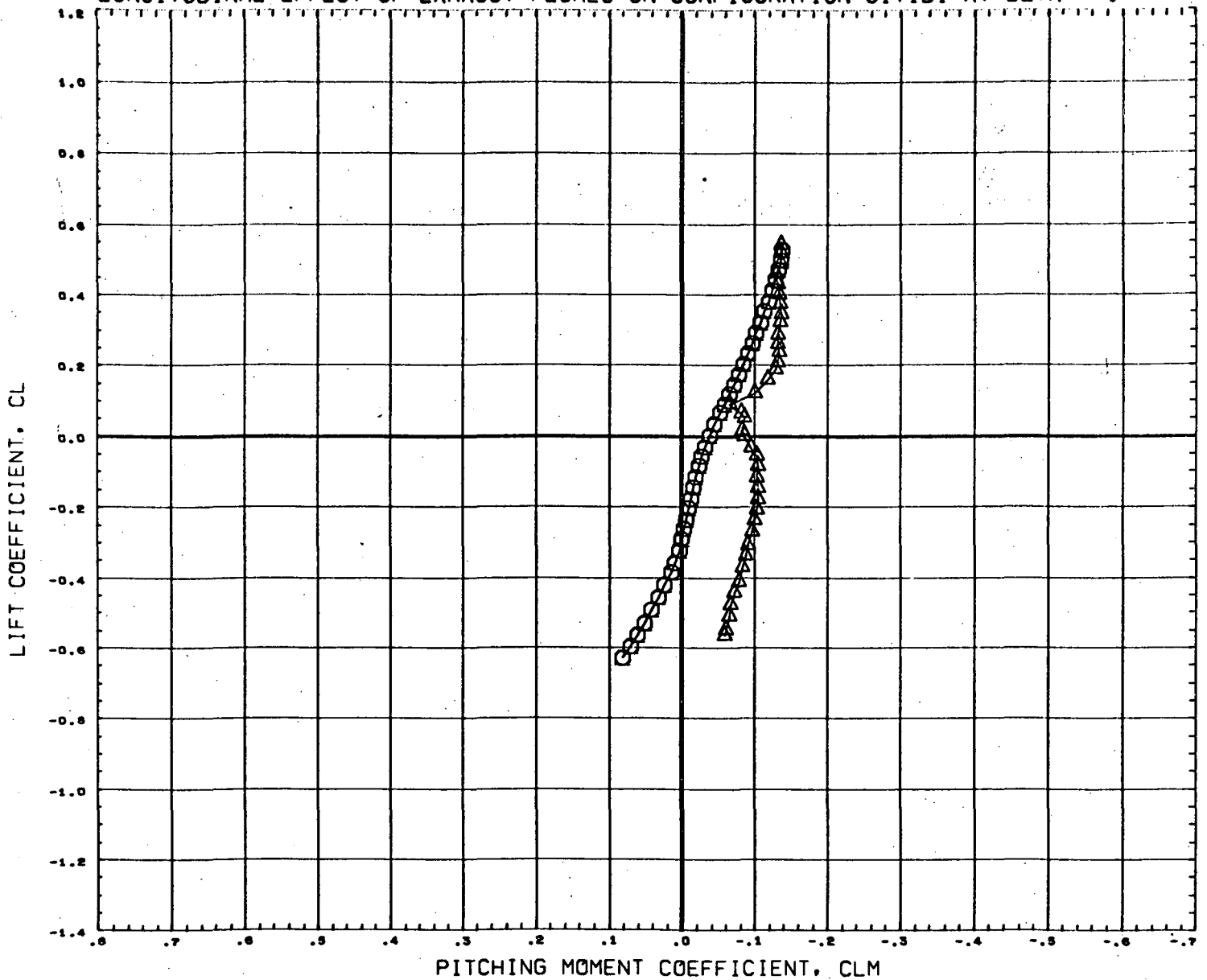


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7501)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7507)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.25

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 0

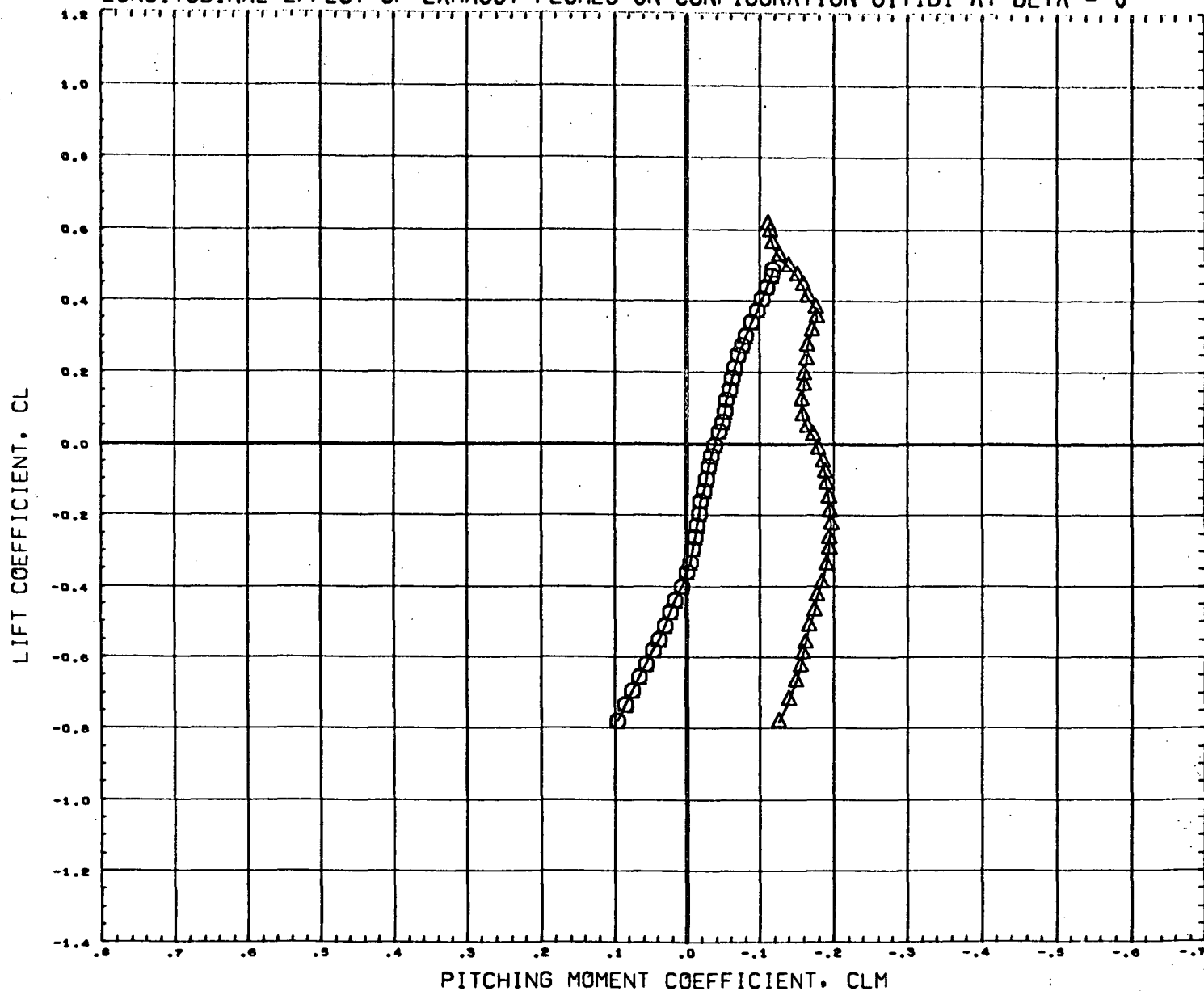


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7501)	NDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7507)	NDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						SREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 0

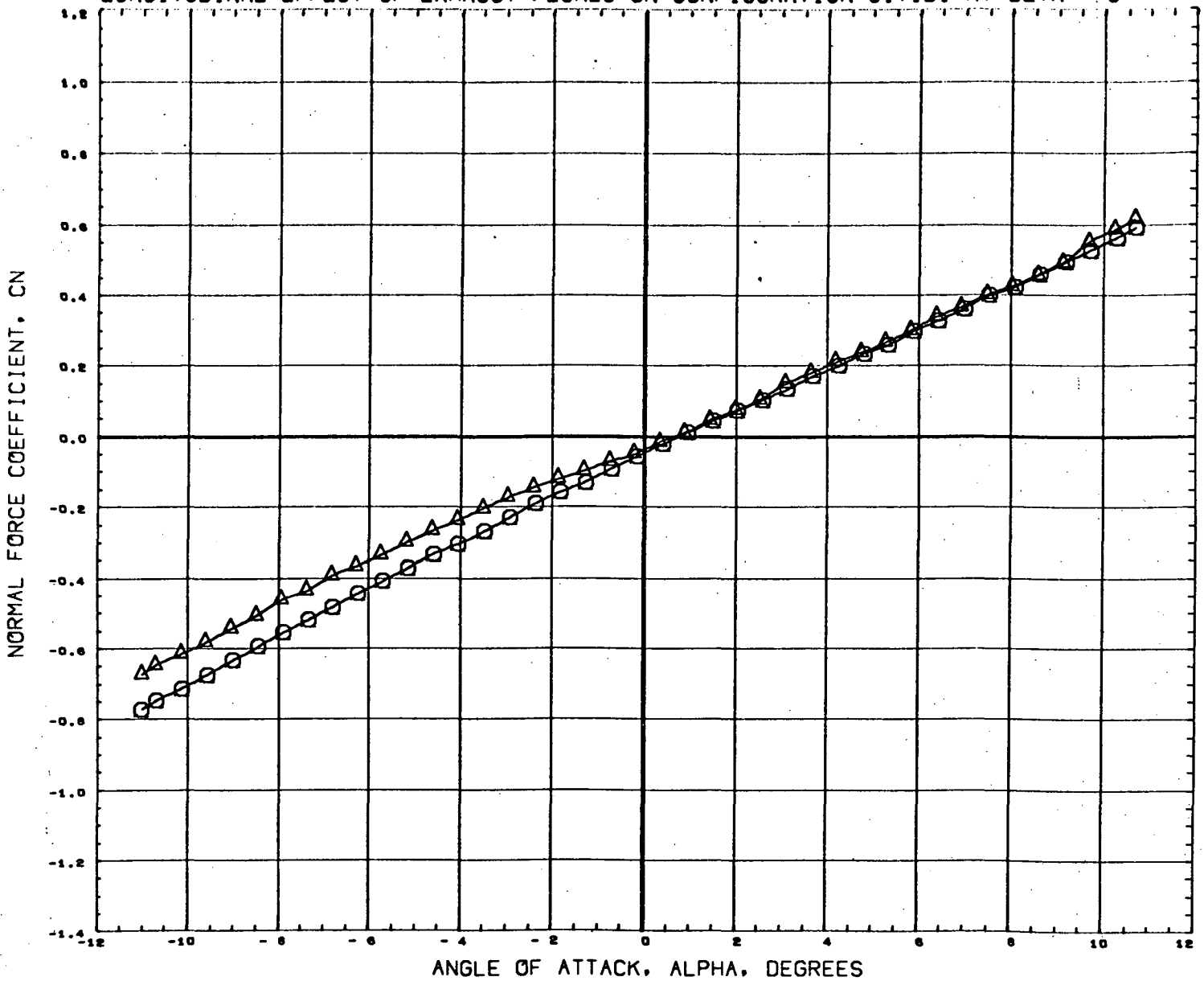


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7501)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7507)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6



DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
(CD7503)    ○    MDAC S-222 COMPOSITE (T-CG) 01T1B1  
(CD7508)    △    MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)

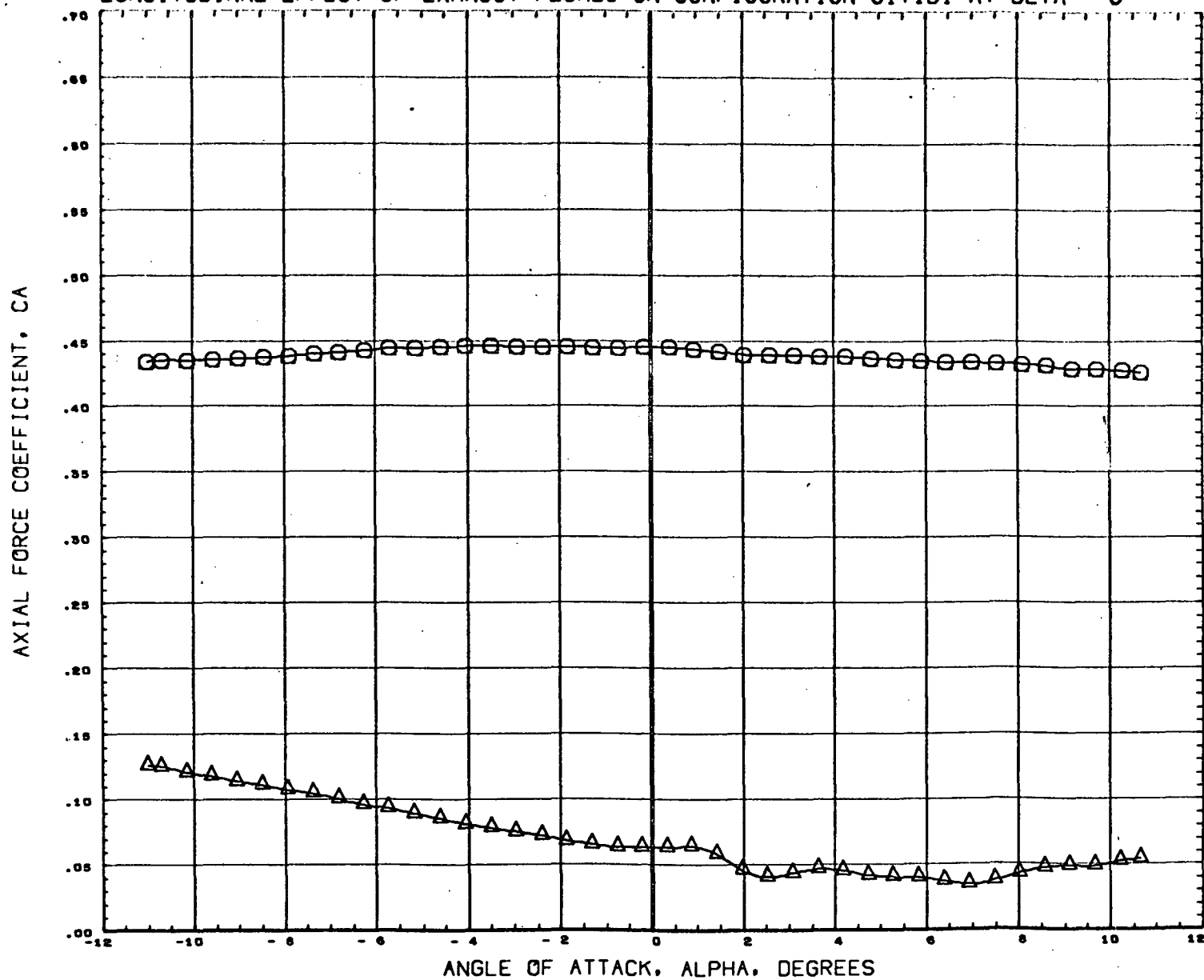
BETA    ELEVTR    AILRON    RUDDER  
6.000    0.000    0.000    0.000  
6.000    0.000    0.000    0.000

REFERENCE INFORMATION  
SREF    3155.3040    SQ.FT.  
LREF    609.5004    IN.  
BREF    882.0004    IN.  
XMRP    557.0004    IN.  
YMRP    0.0000    IN.  
ZMRP    200.0004    IN.  
SCALE    0.0060

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7503)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7508)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

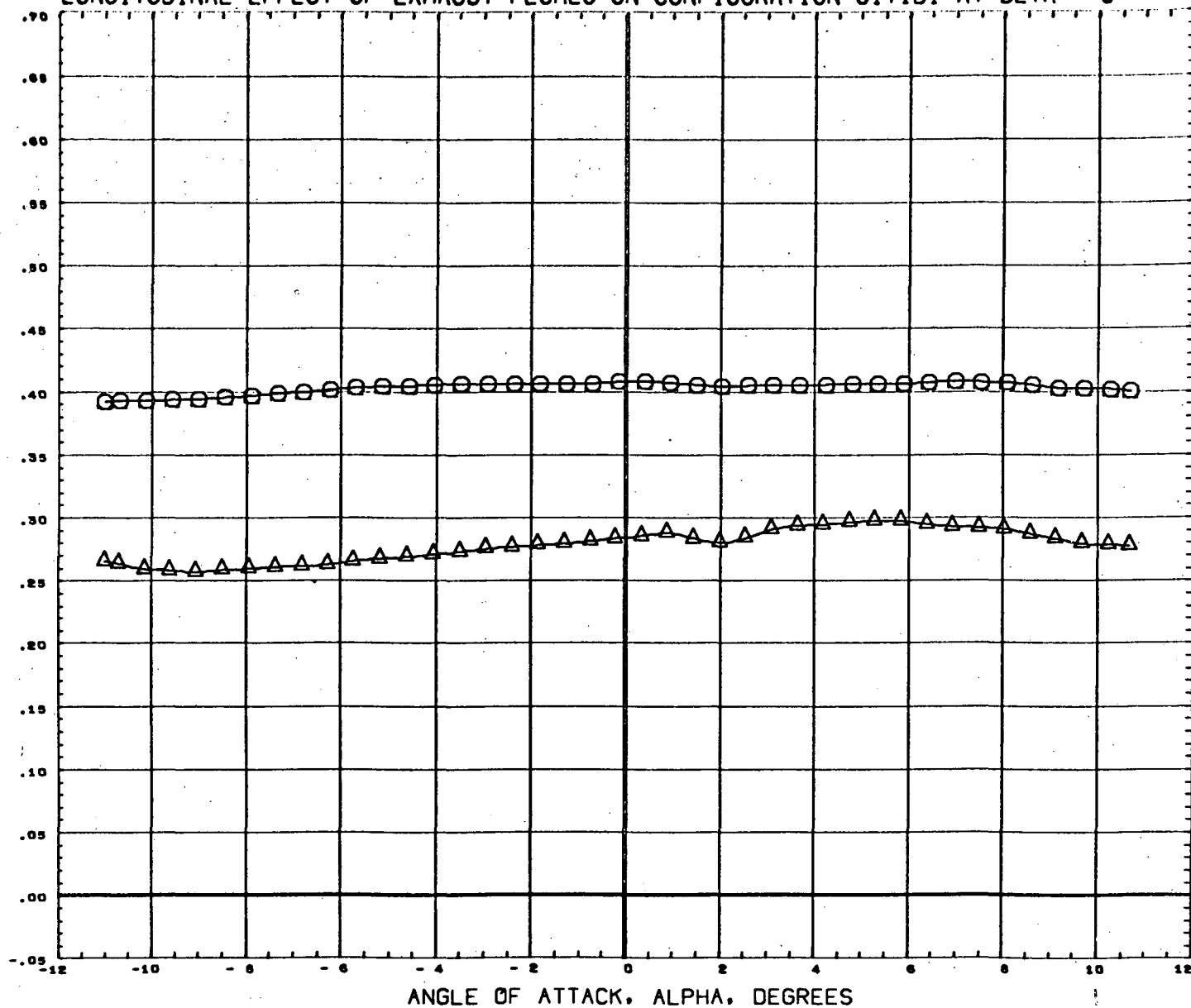
MACH 2.20

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6

FOREBODY AXIAL FORCE COEFFICIENT, CAF

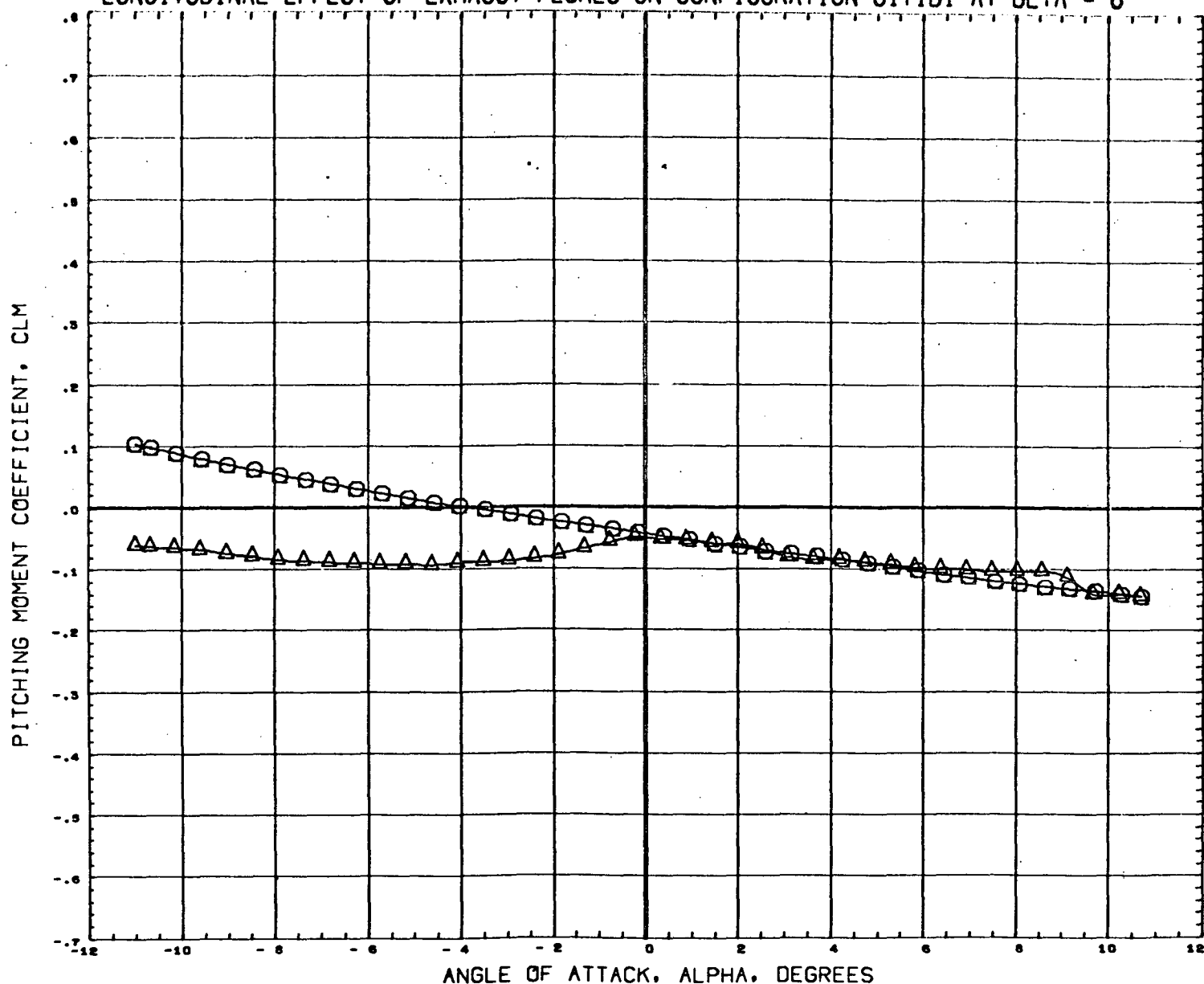


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7503)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7508)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6

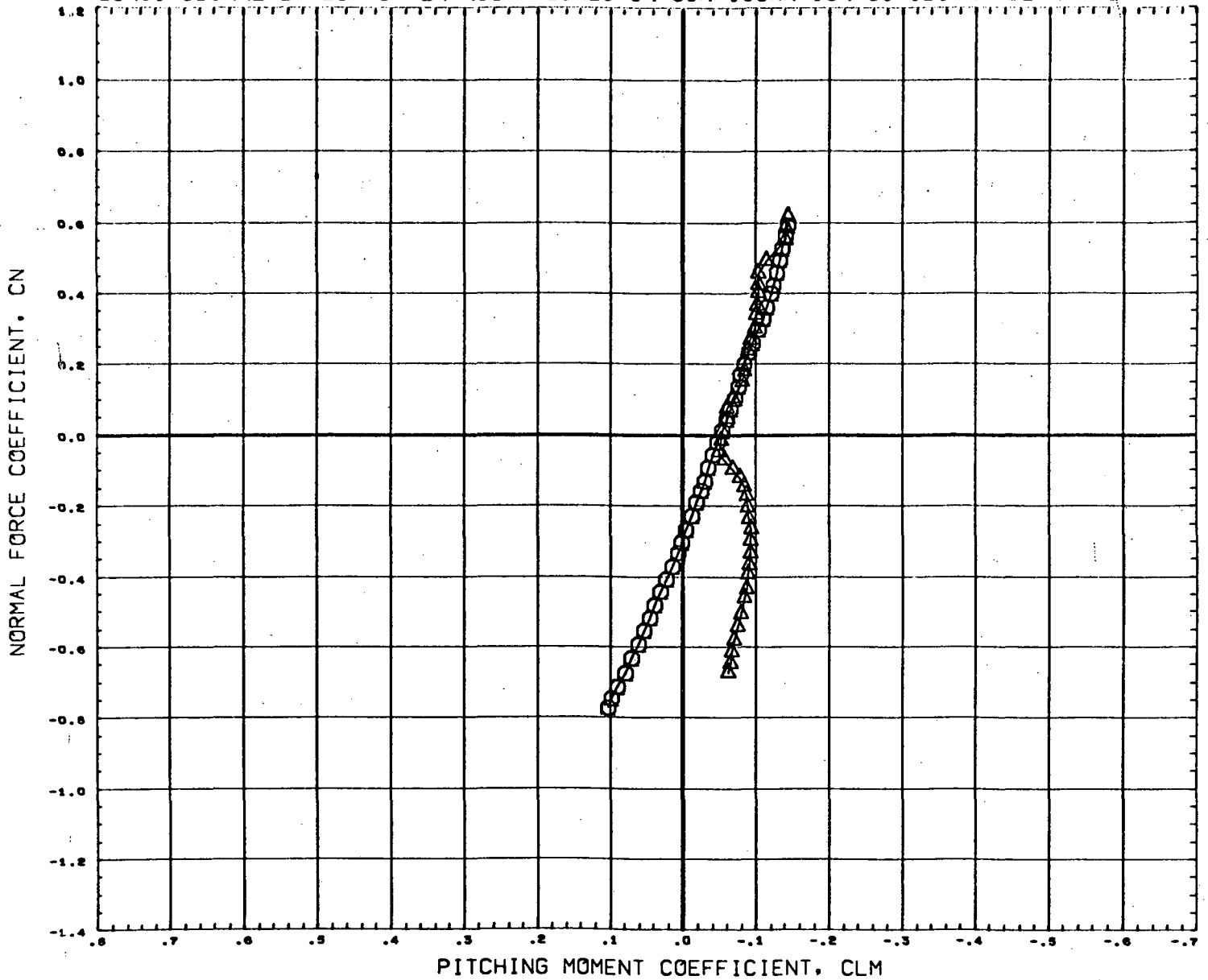


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(CD7503)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7506)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	809.5004	IN.
						BREF	882.0004	IN.
						XMRP	957.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6

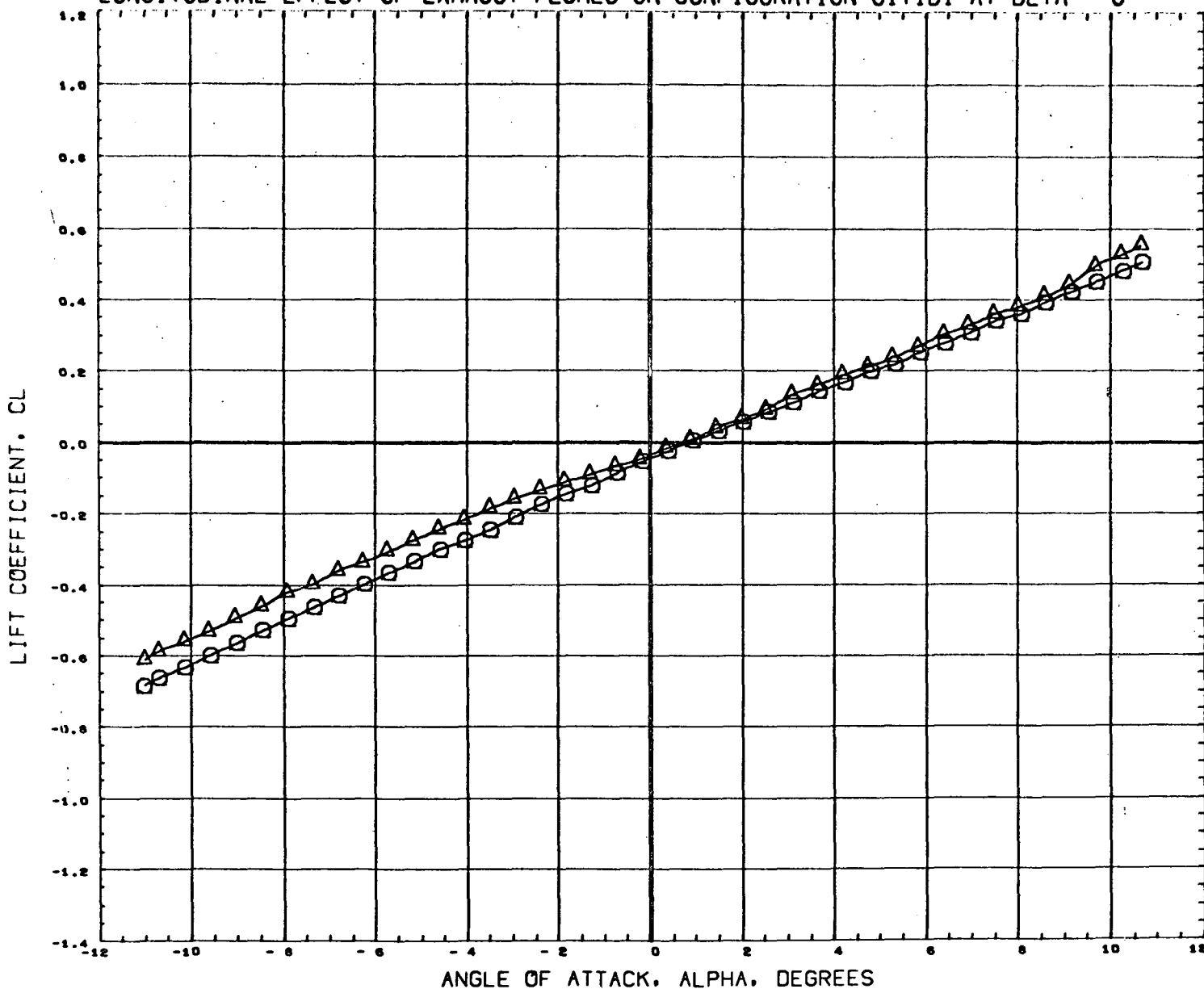


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7503)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7508)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6

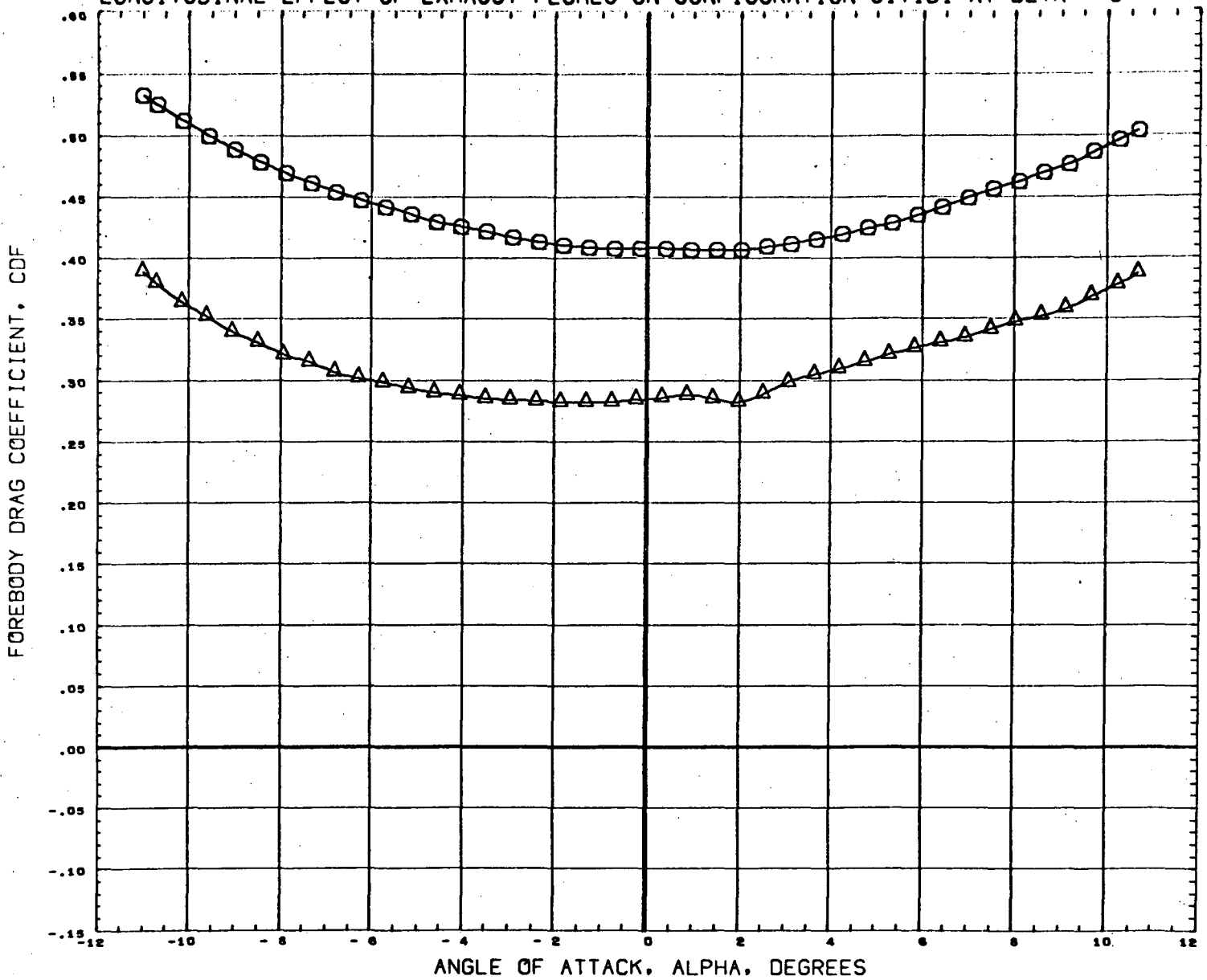


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7503)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7506)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6

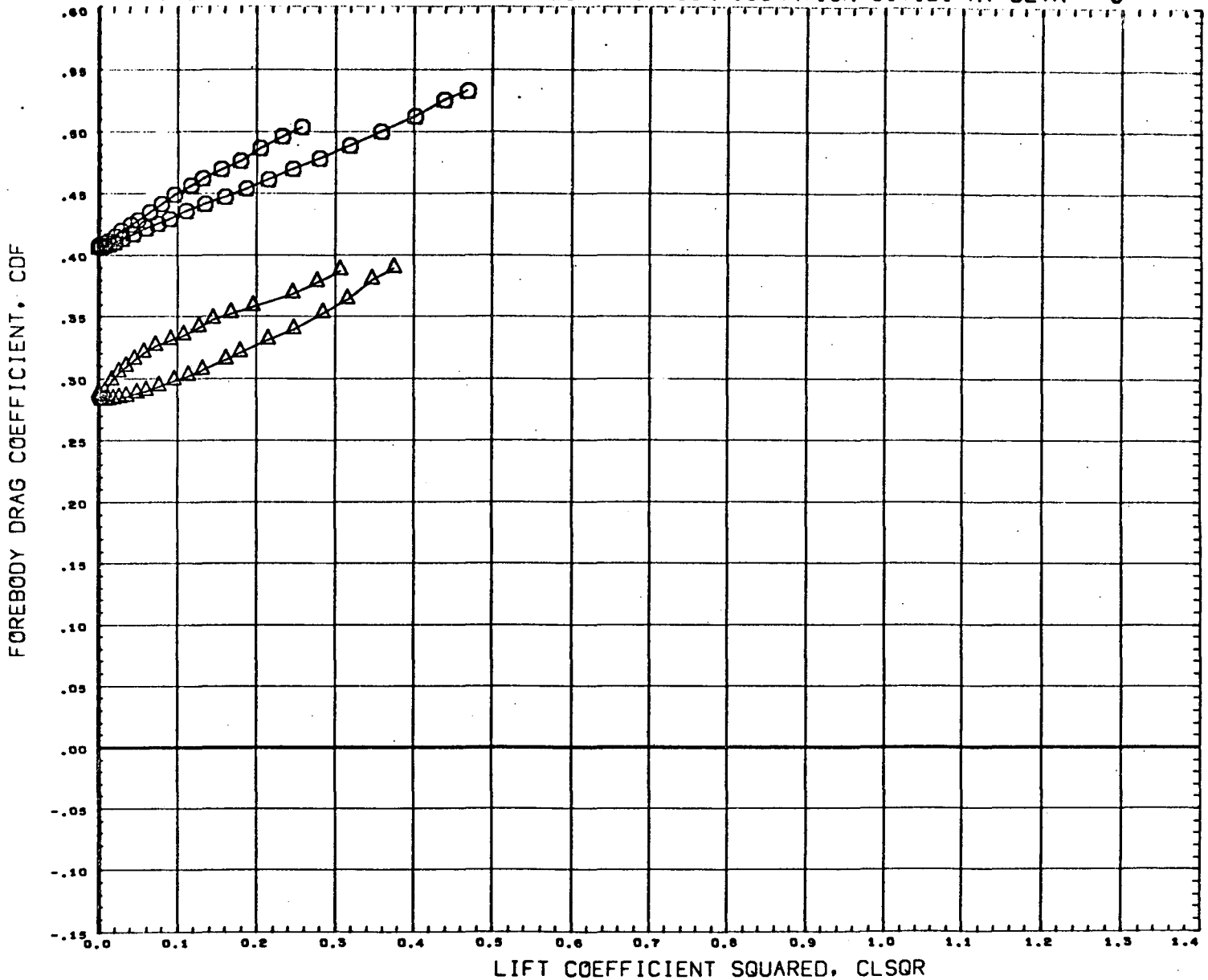


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7503)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7506)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(C07503) 	MDAC S-222 COMPOSITE (T-CG) 01T1B1
(C07506) 	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)

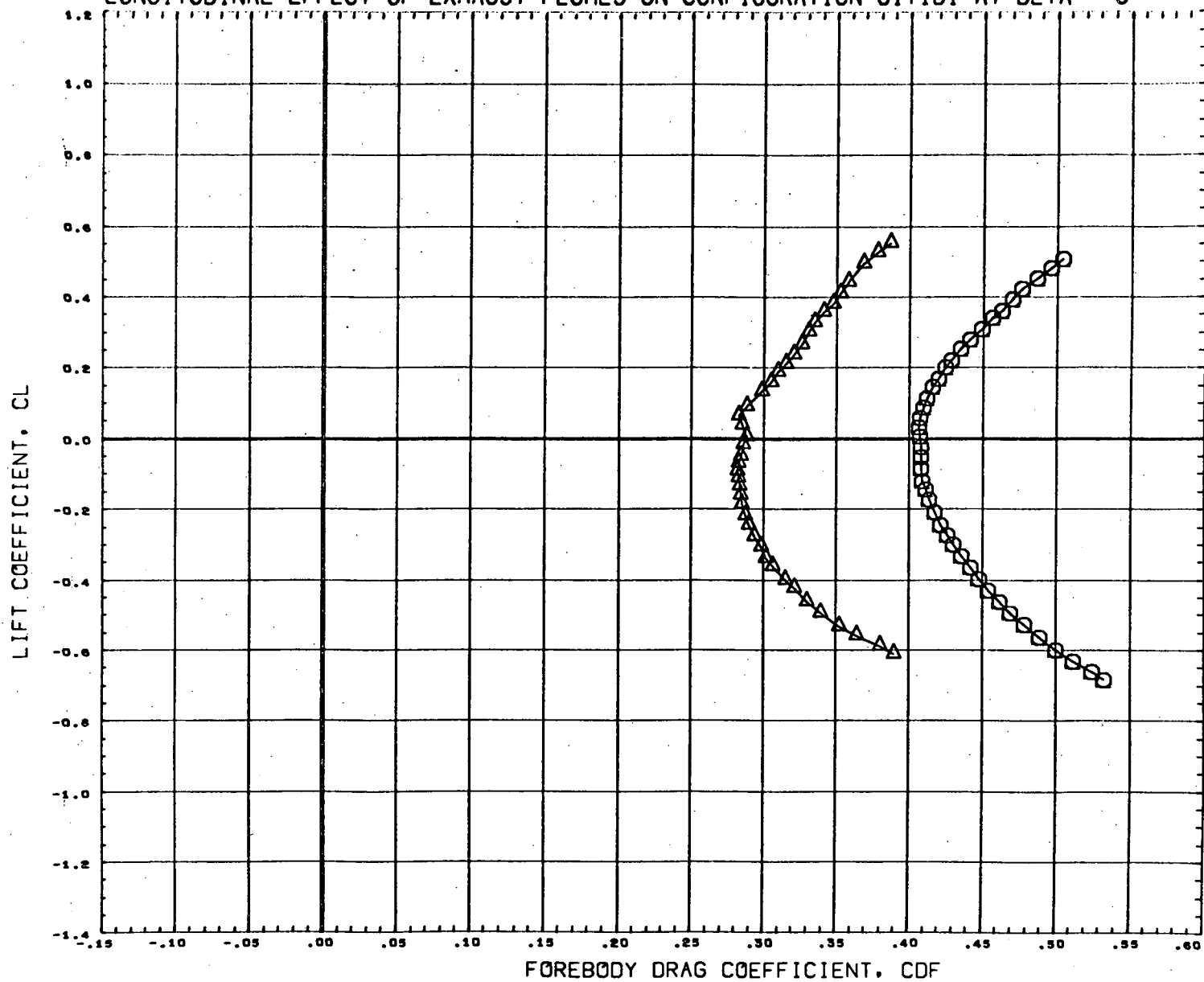
BETA	ELEVTR	AILRON	RUDDER
6.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	.882.0004	IN.
YMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6

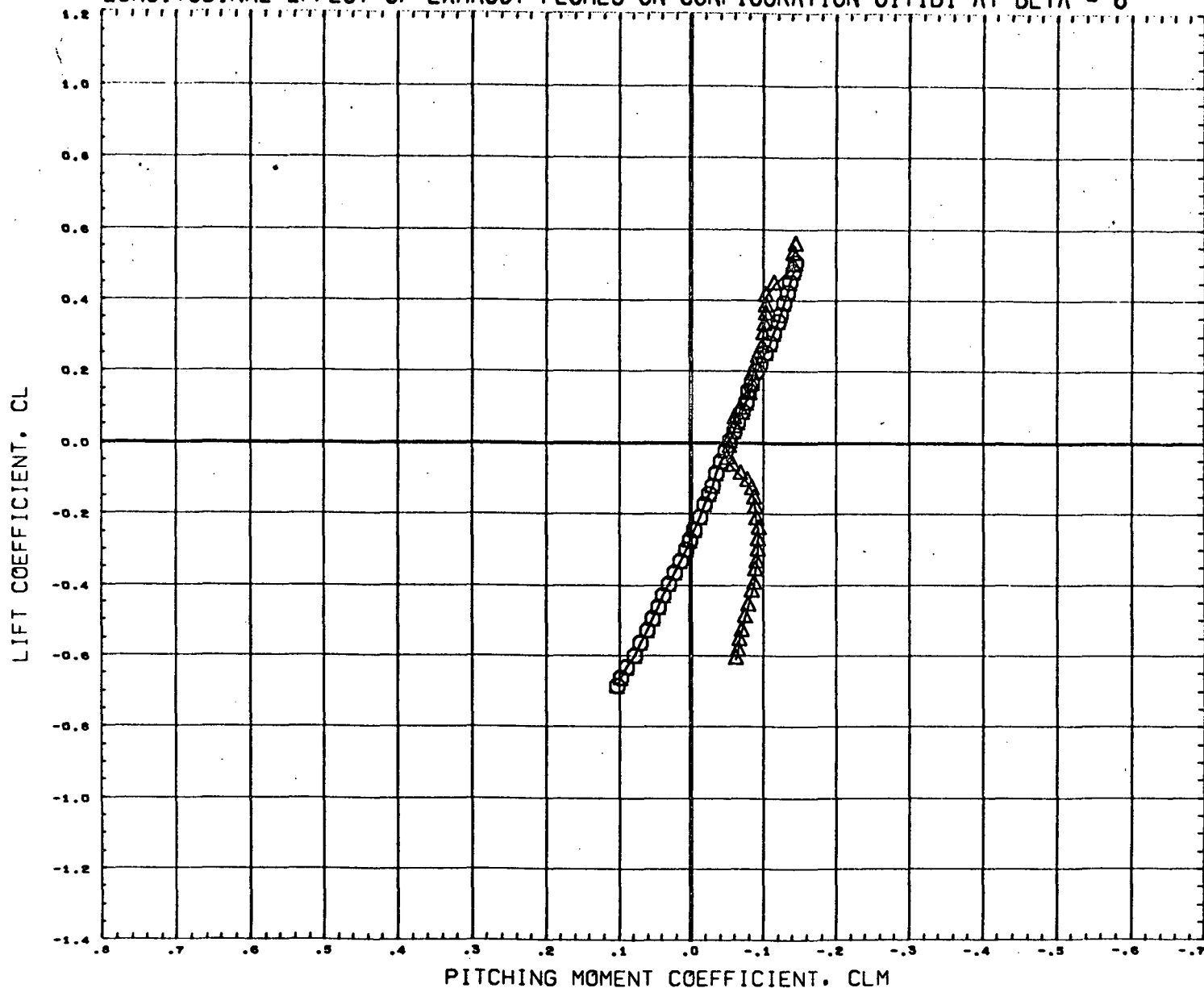


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7503)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7508)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	662.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LONGITUDINAL EFFECT OF EXHAUST PLUMES ON CONFIGURATION 01T1B1 AT BETA = 6



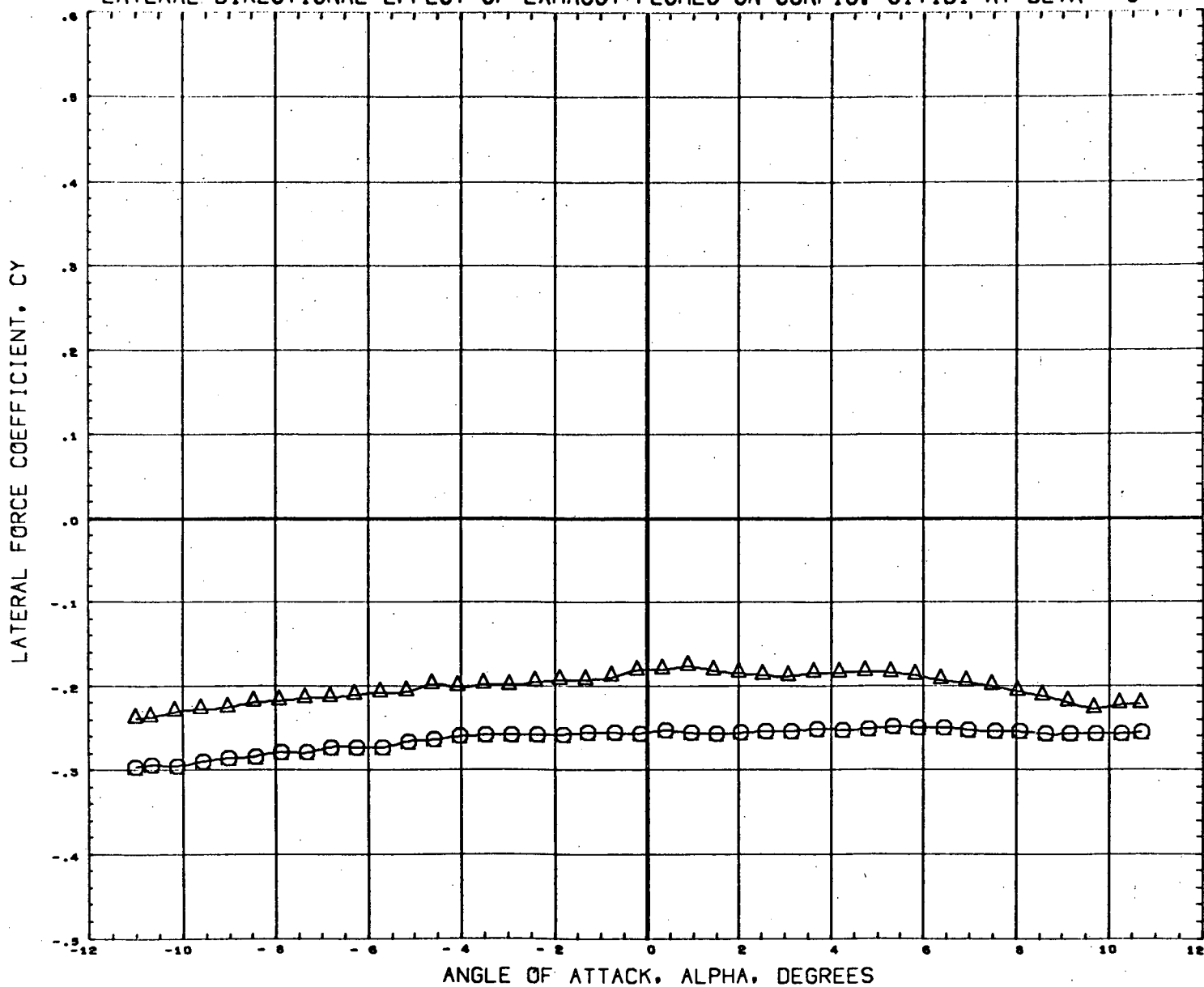
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7503)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7508)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LATERAL-DIRECTIONAL EFFECT OF EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 6

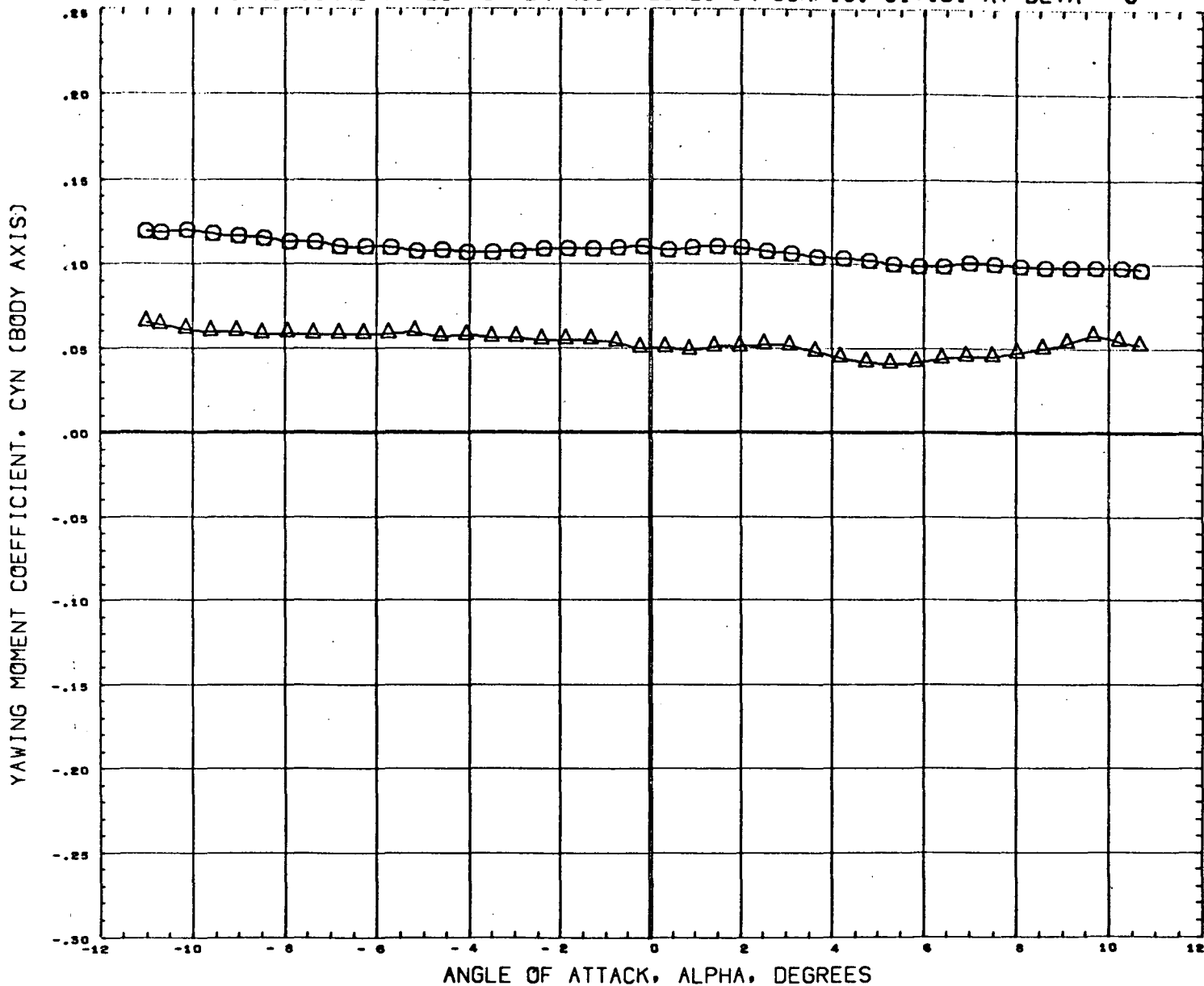


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7503)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7508)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	662.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LATERAL-DIRECTIONAL EFFECT OF EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 6

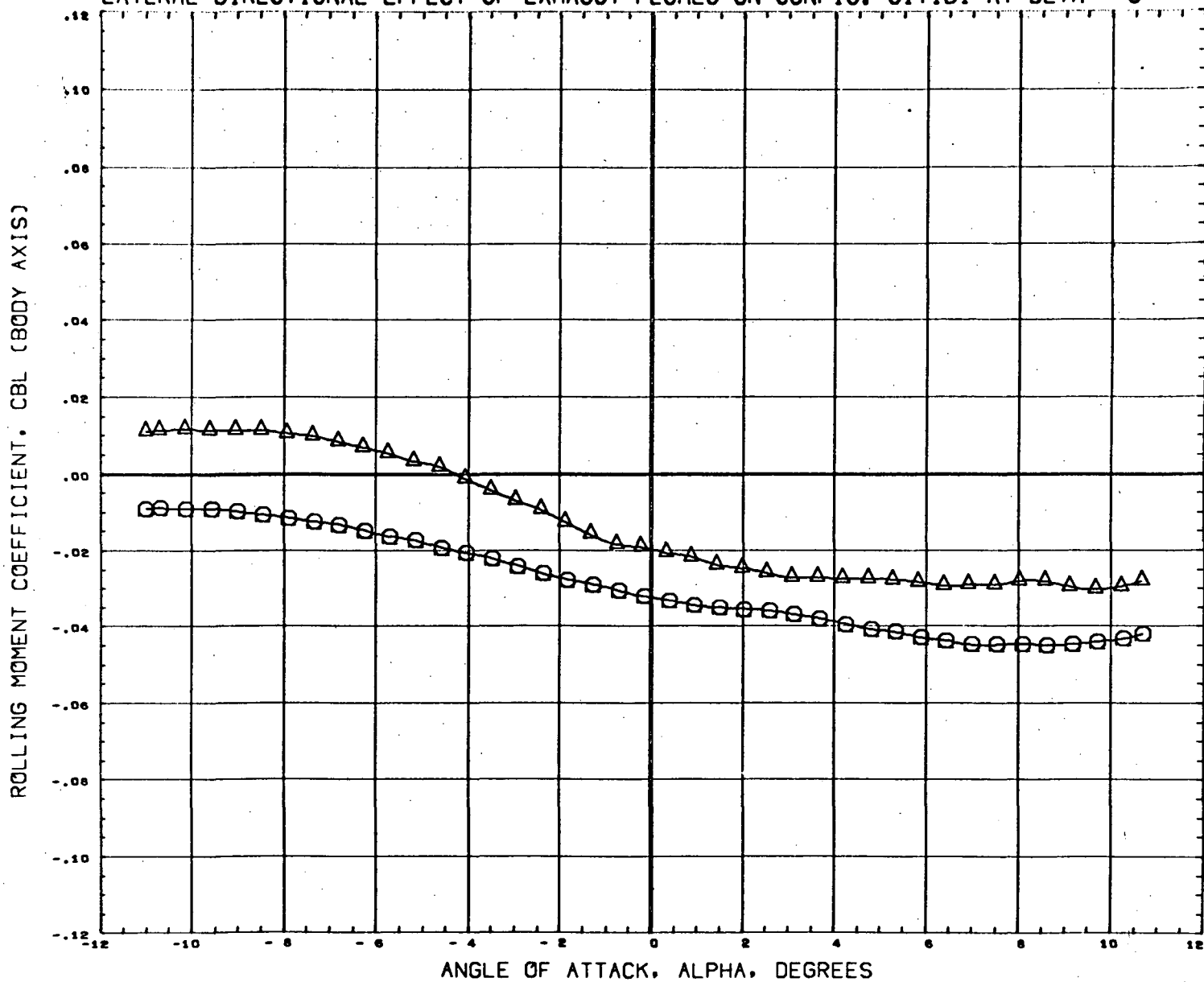


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7503)	MDAC S-222 COMPOSITE (T-C6) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7506)	MDAC S-222 COMPOSITE (T-C6) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	662.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LATERAL-DIRECTIONAL EFFECT OF EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 6

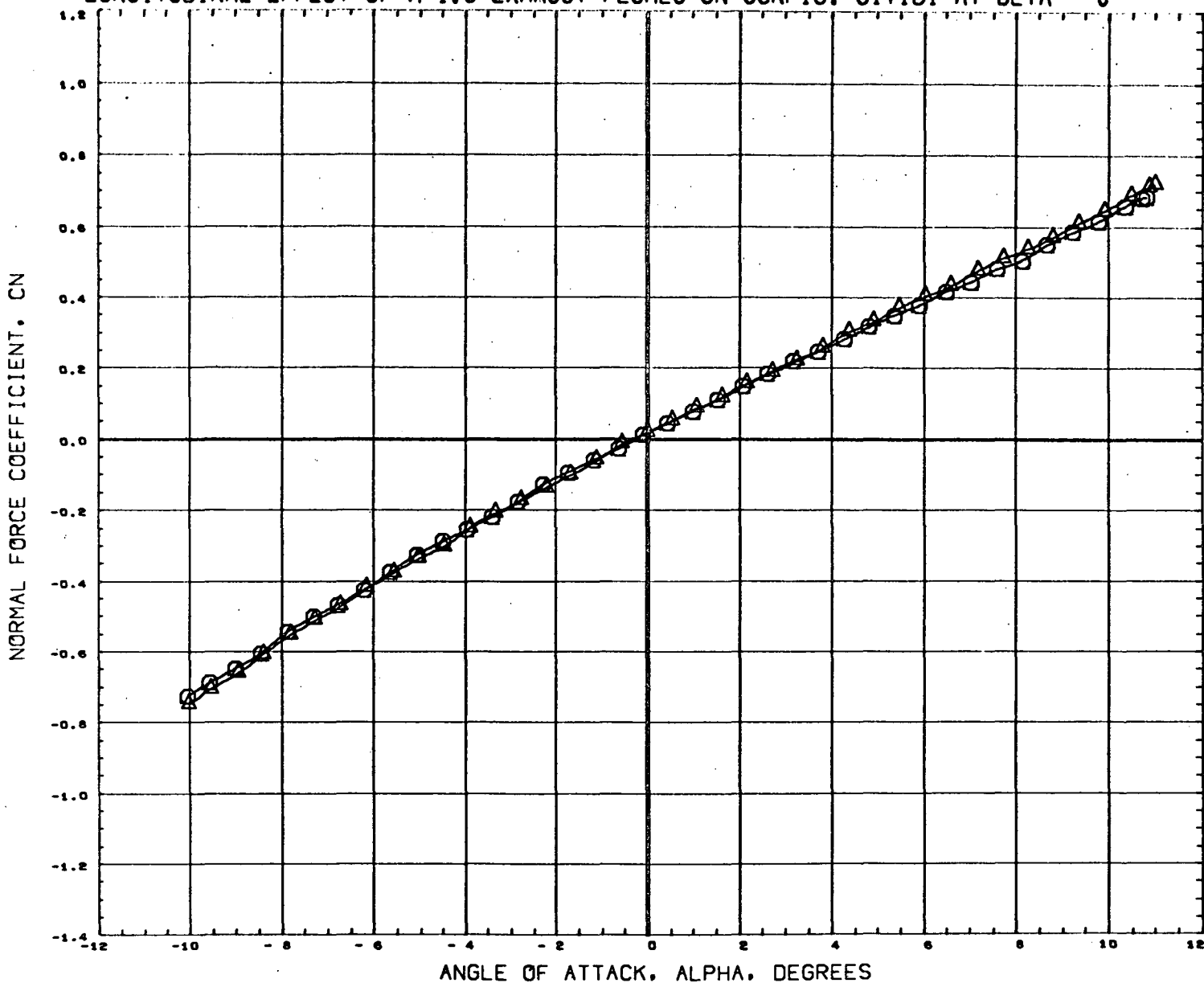


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7505)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7506)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (2.5)	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

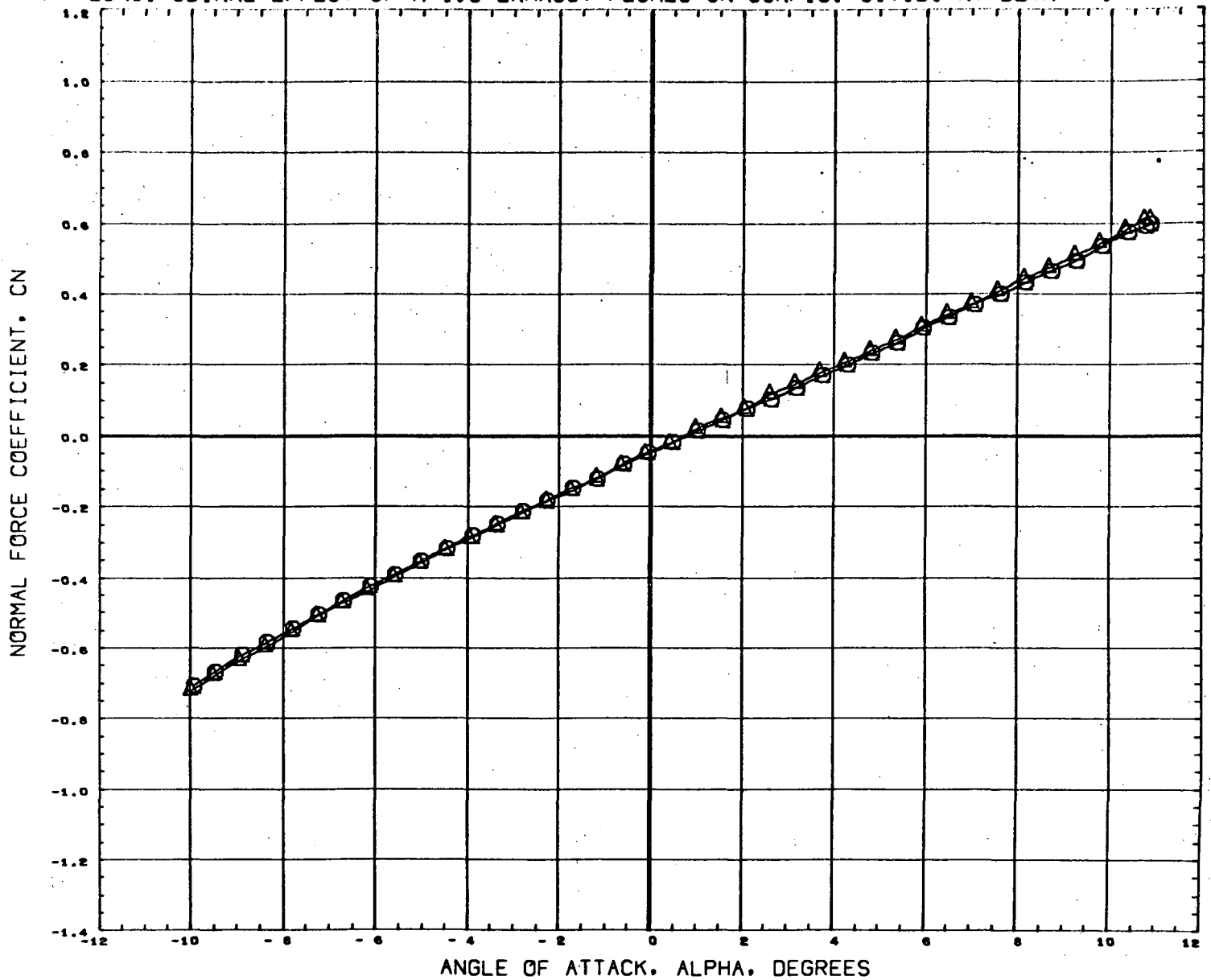


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRF	957.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

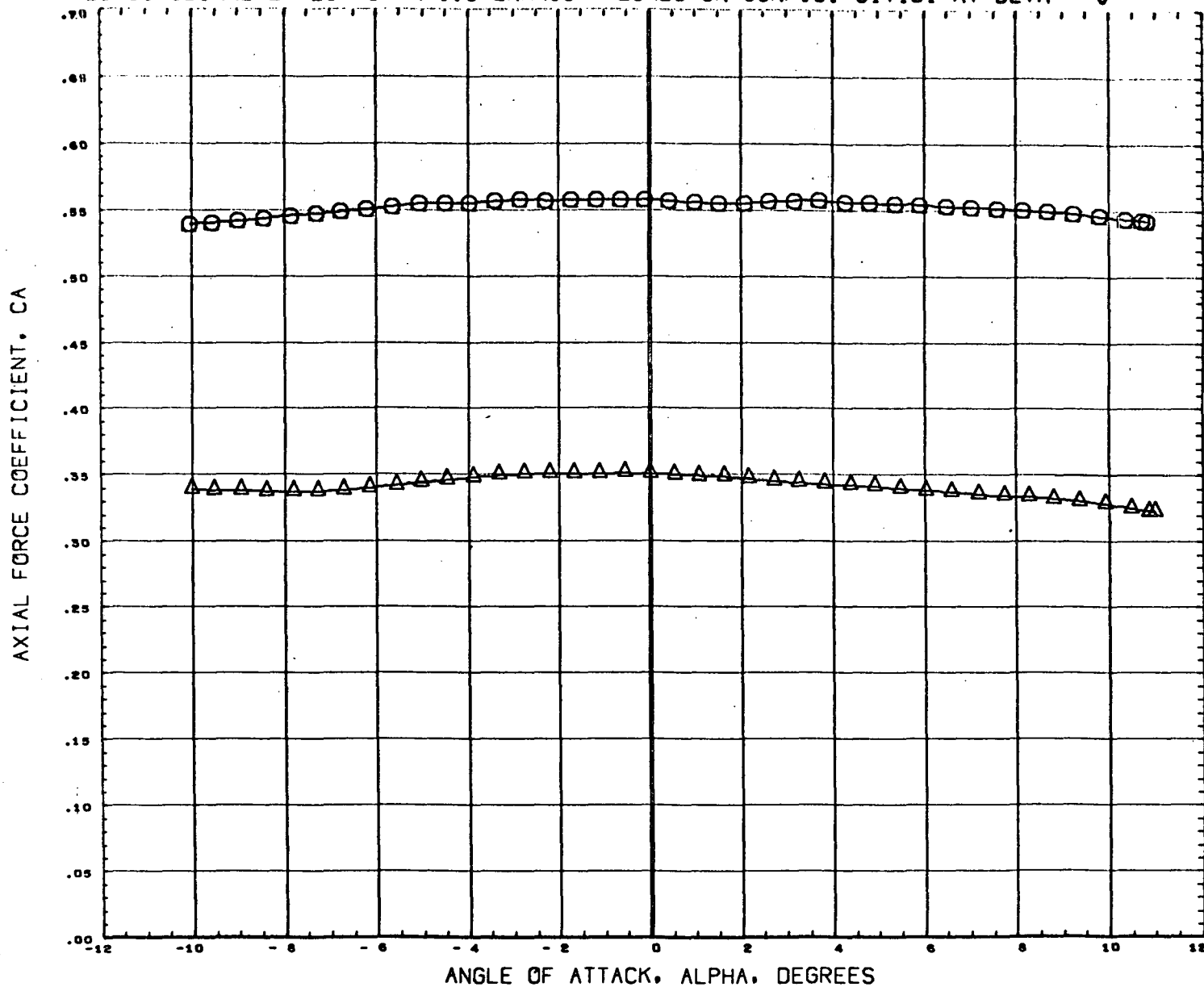


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7526)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7536)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMHP	557.0004 IN.
						YMHP	0.0000 IN.
						ZMHP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

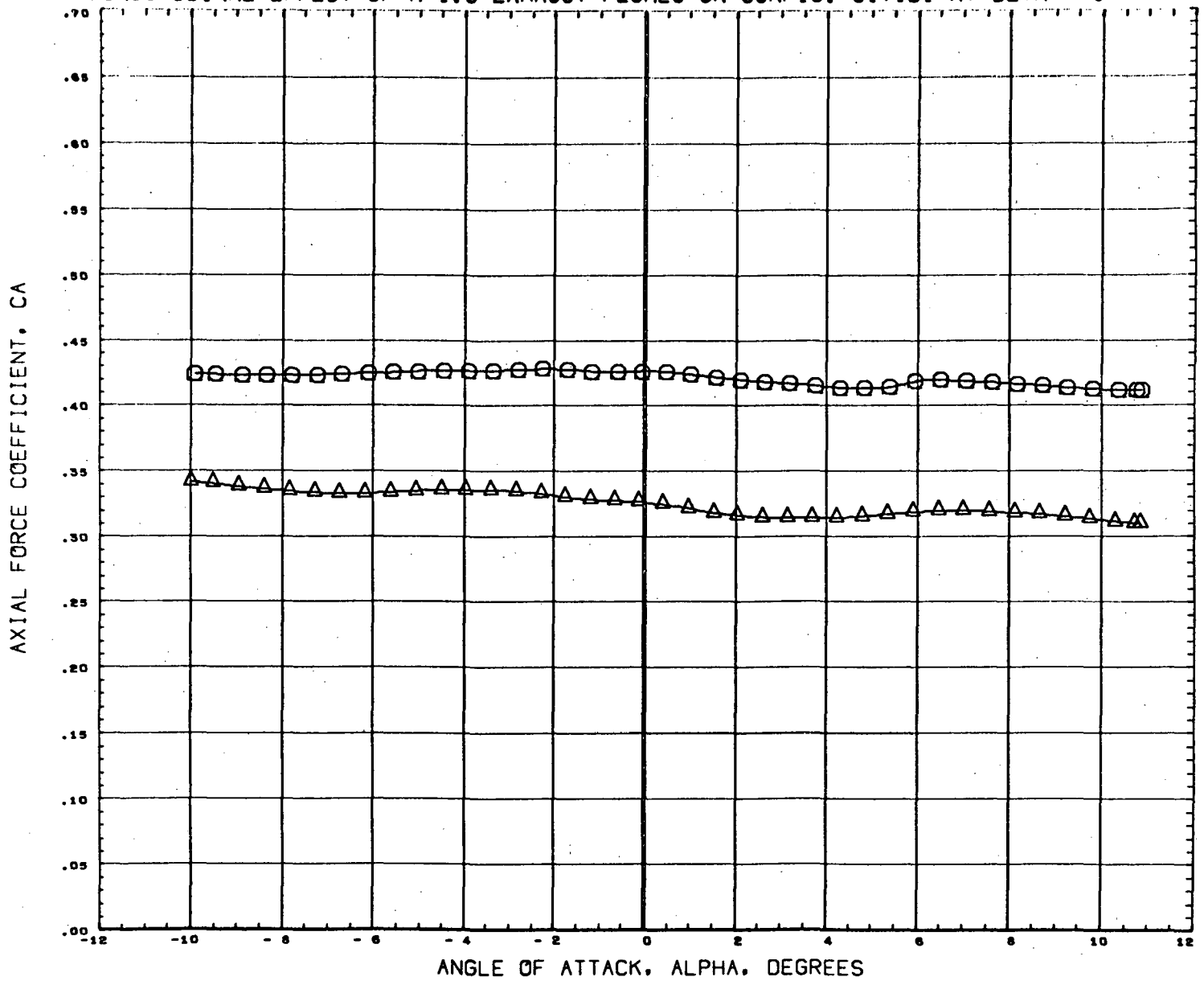


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7536)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

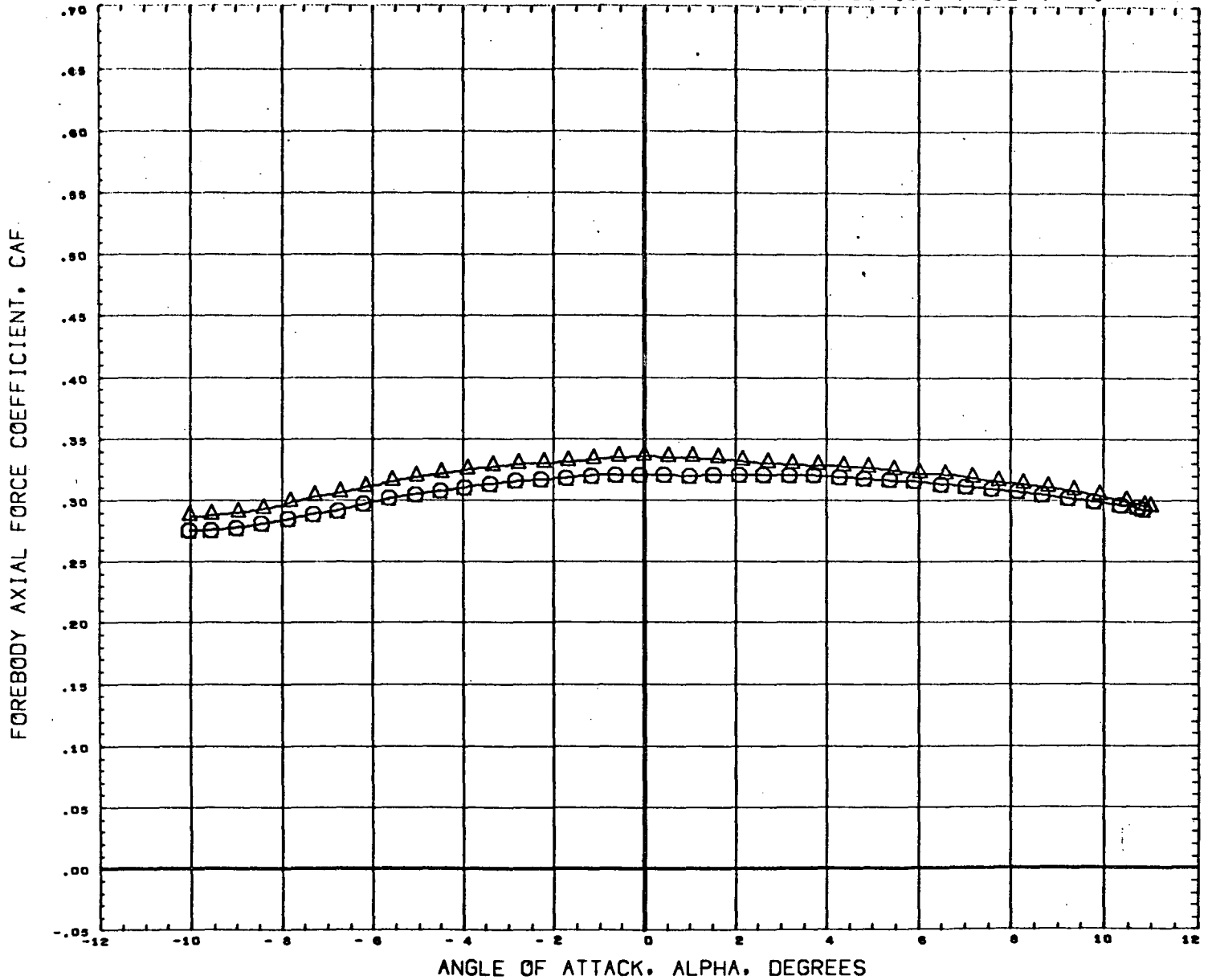


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE(T-C6) O1T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE(T-C6) O1T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07526)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07536)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

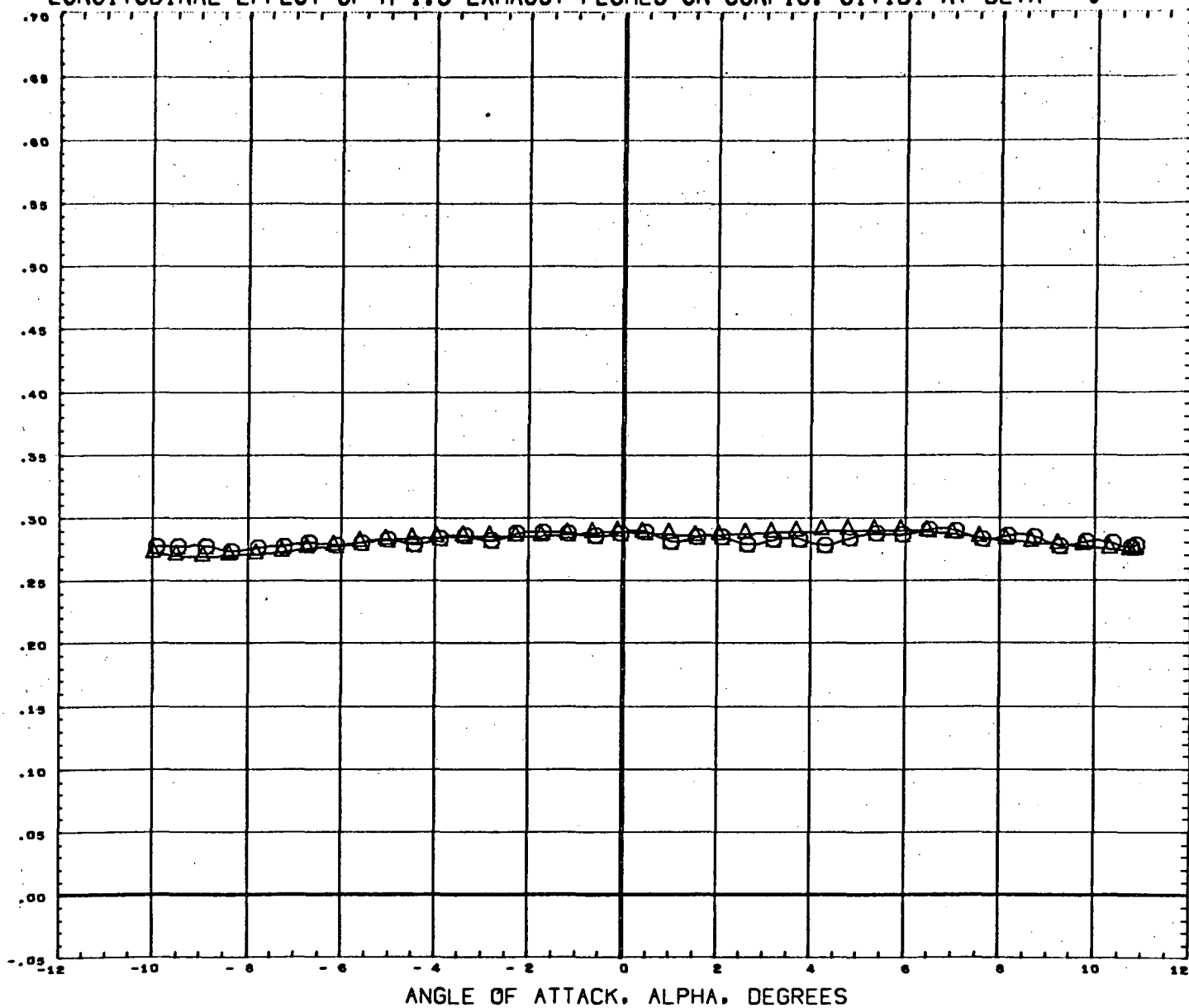
MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF

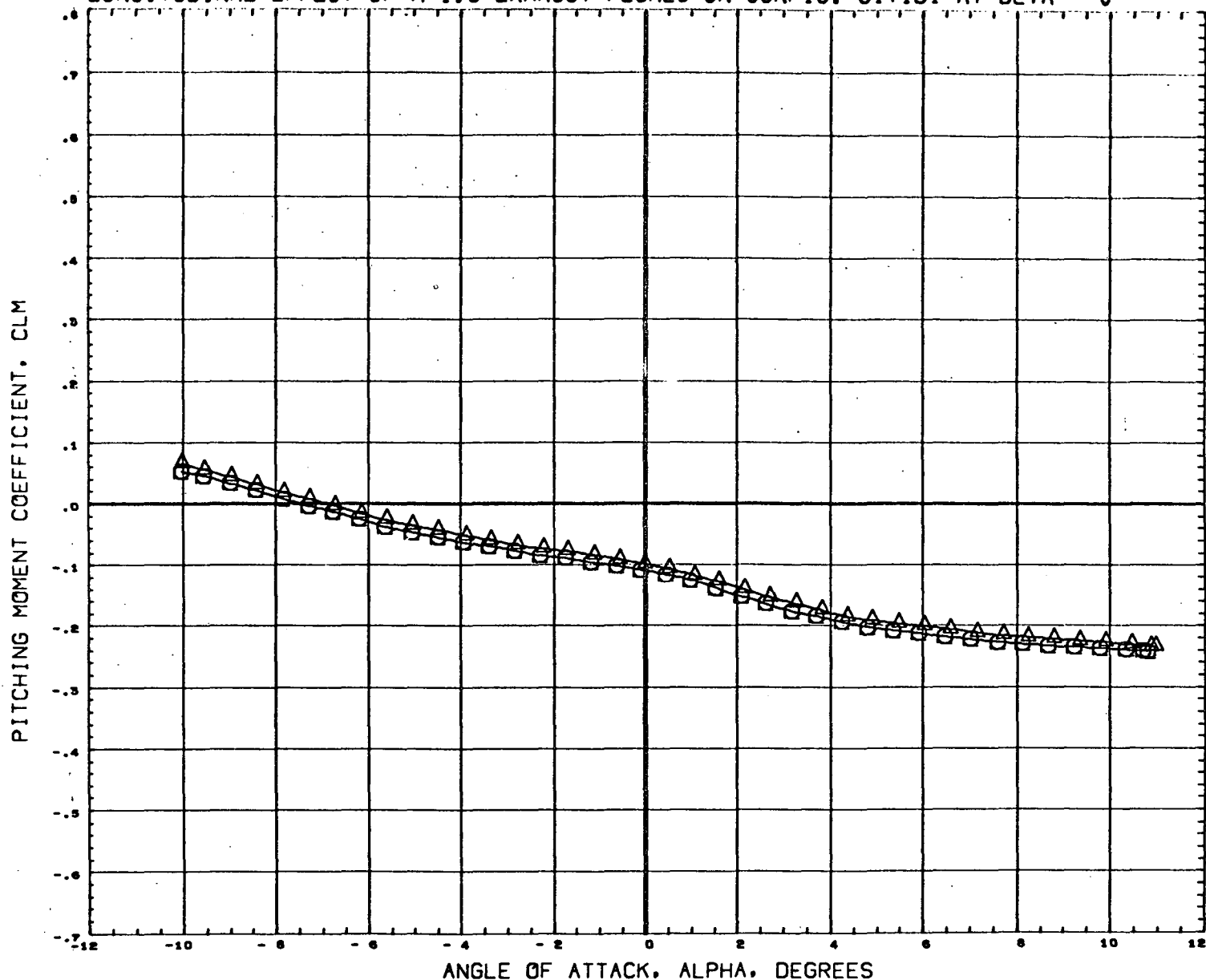


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3153.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

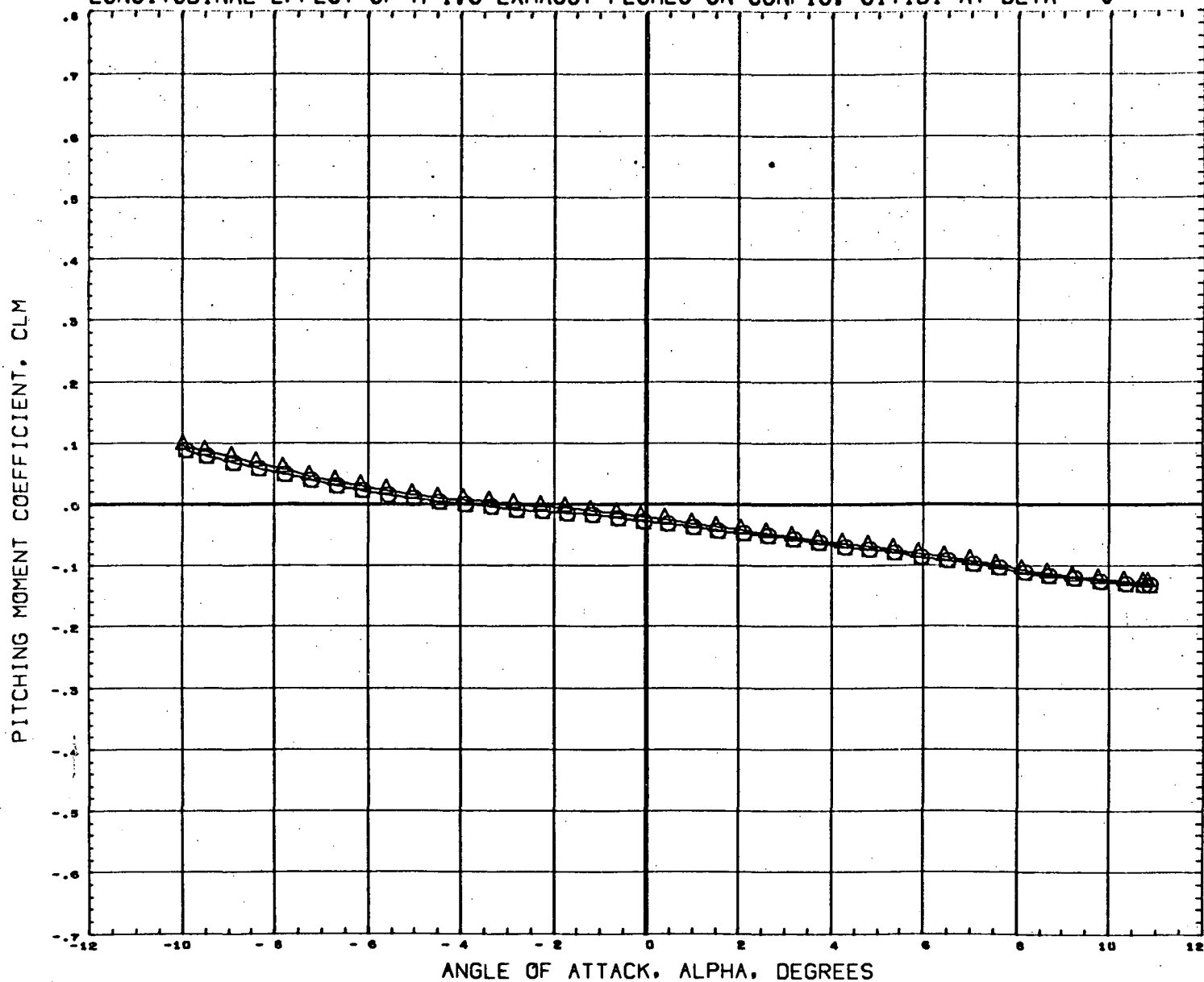


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

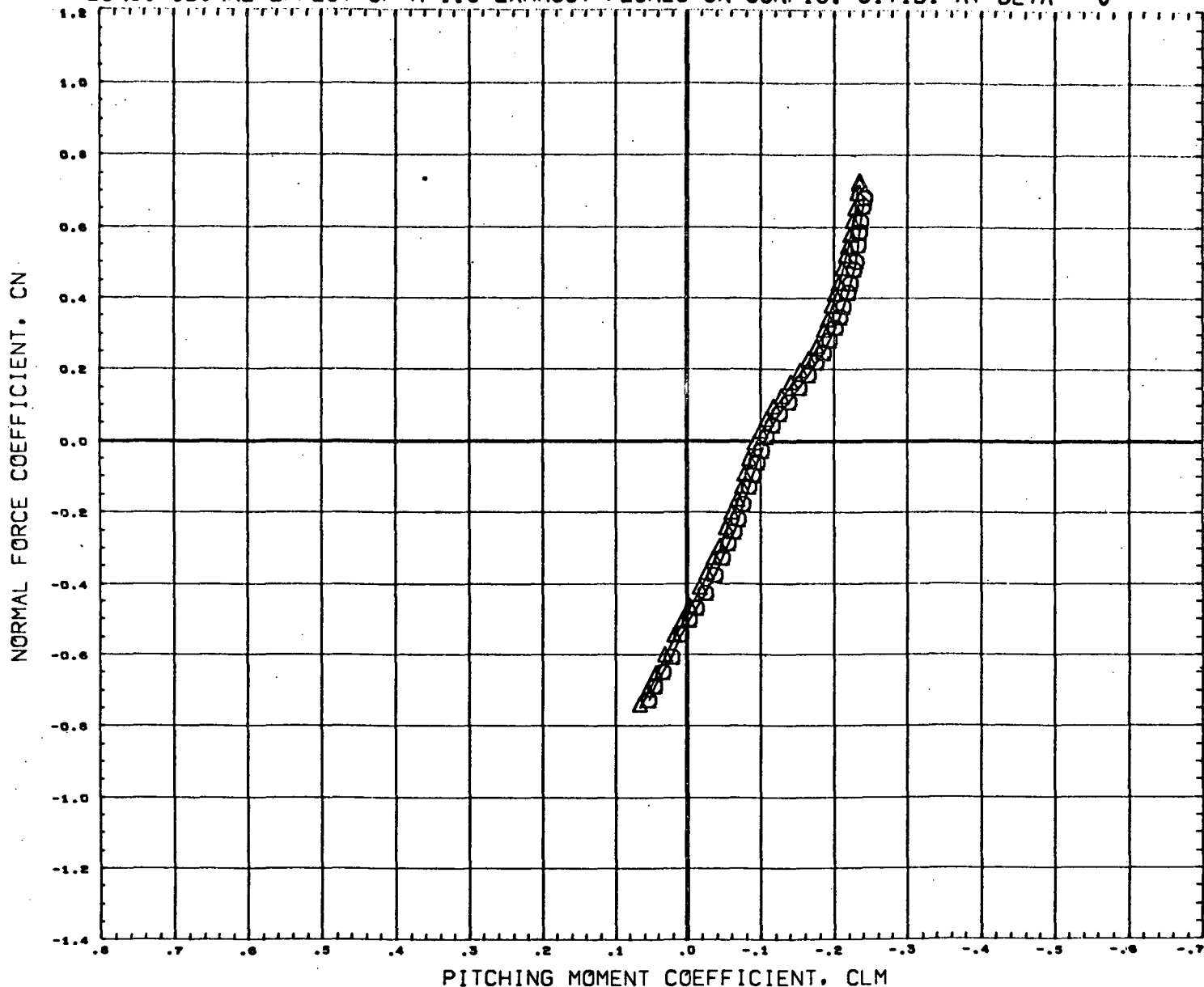


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	662.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

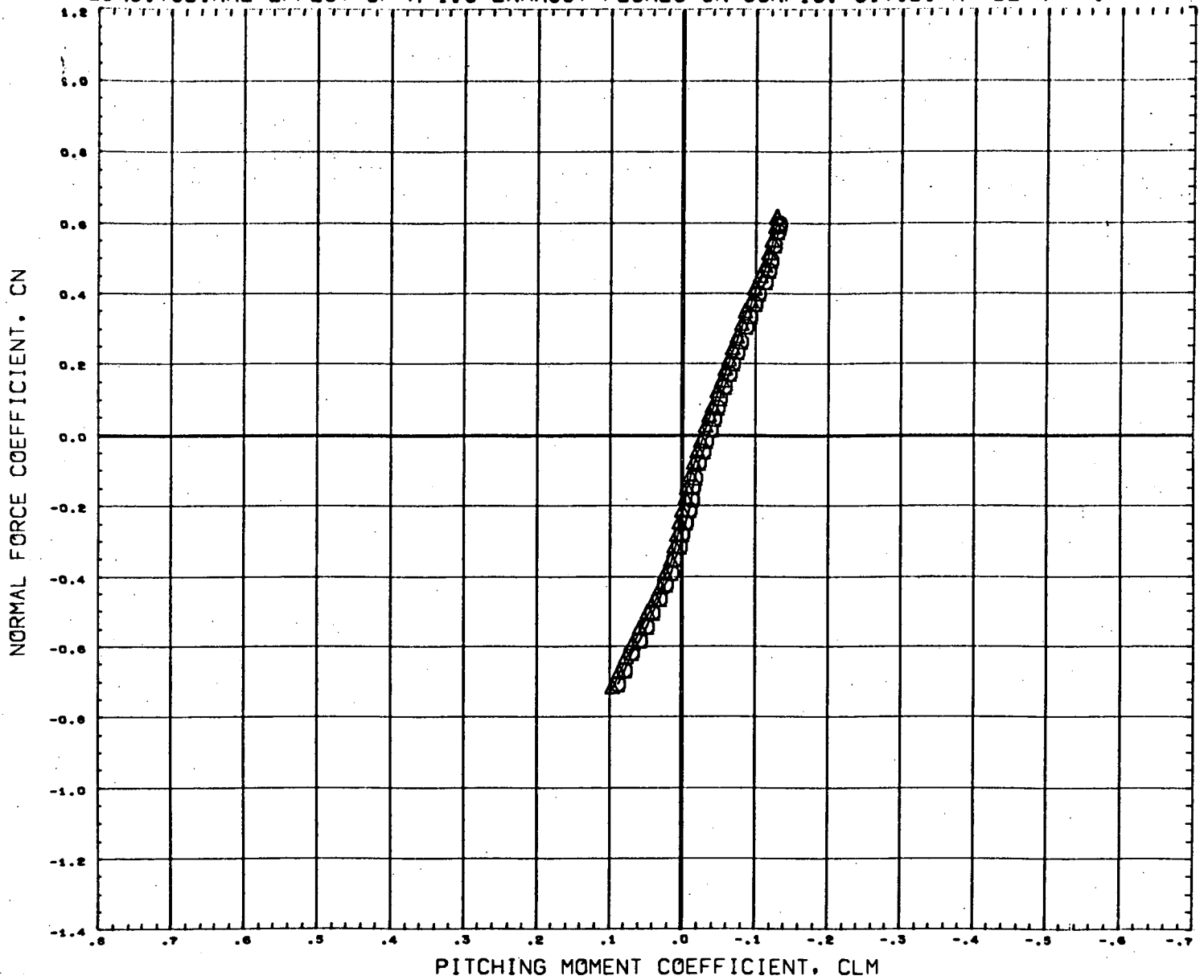


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	Q MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	A MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XWRP	557.0004 IN.
						YWRP	0.0000 IN.
						ZWRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

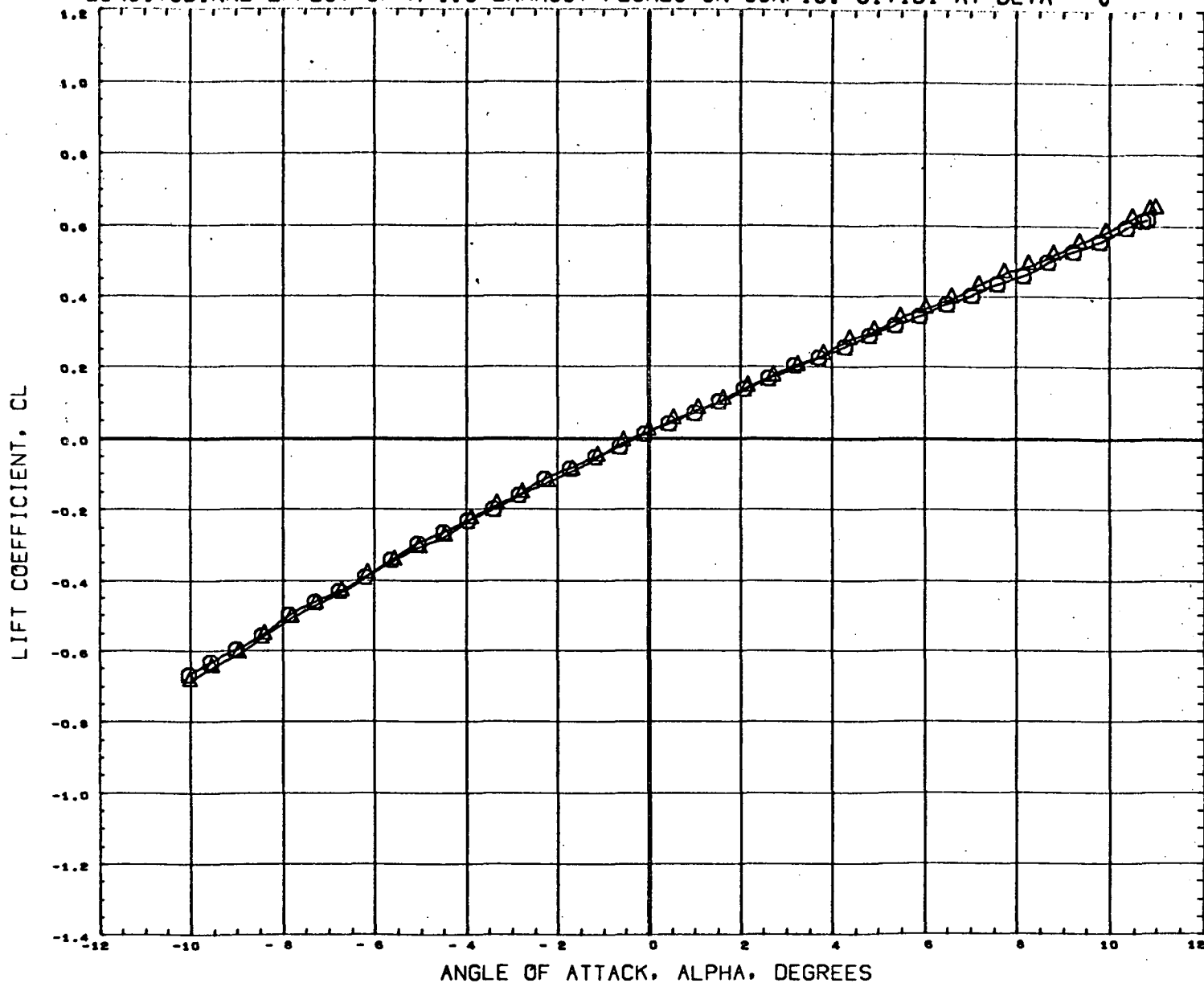
PAGE 42

# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE (T-C6) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE (T-C6) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

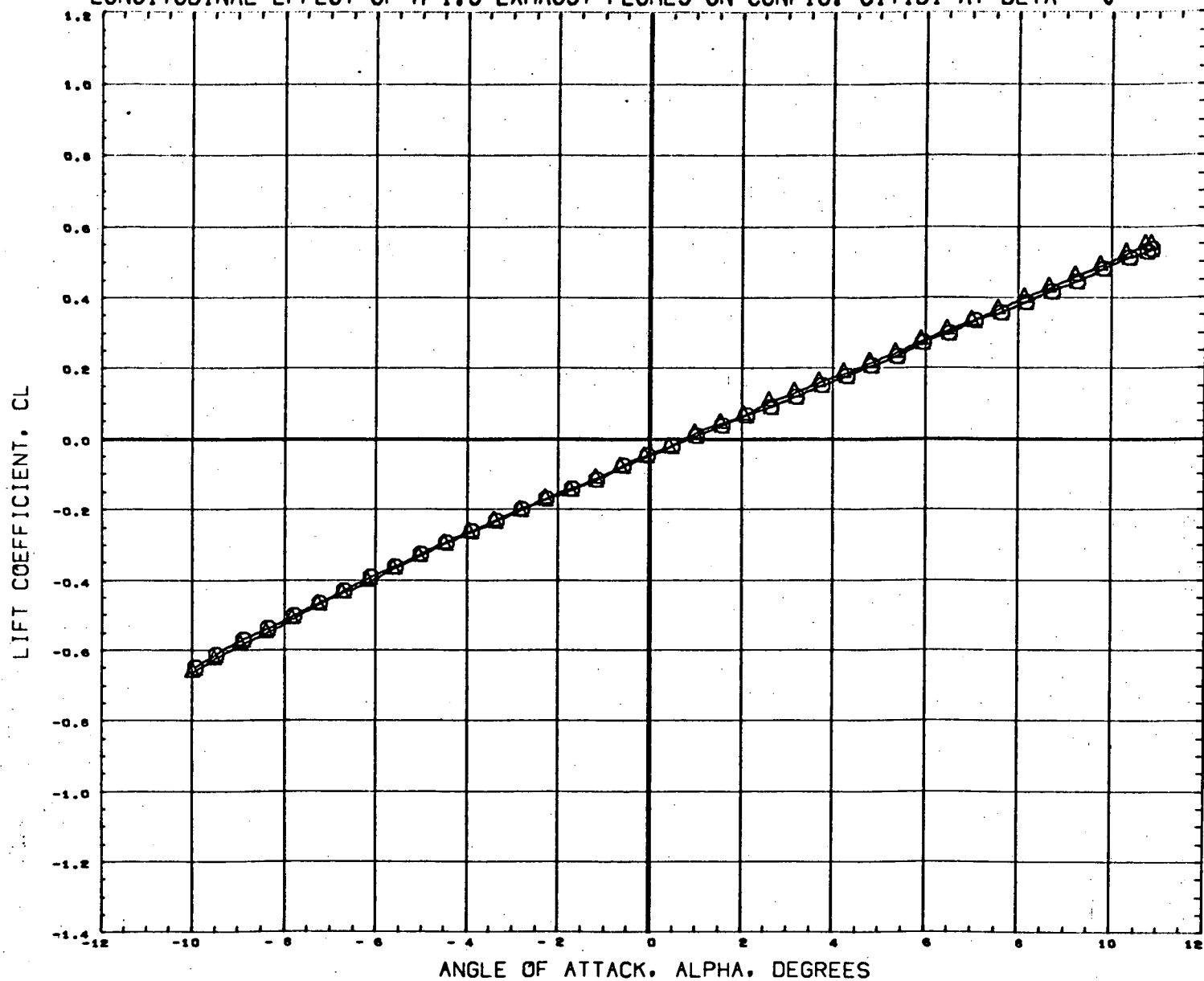


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

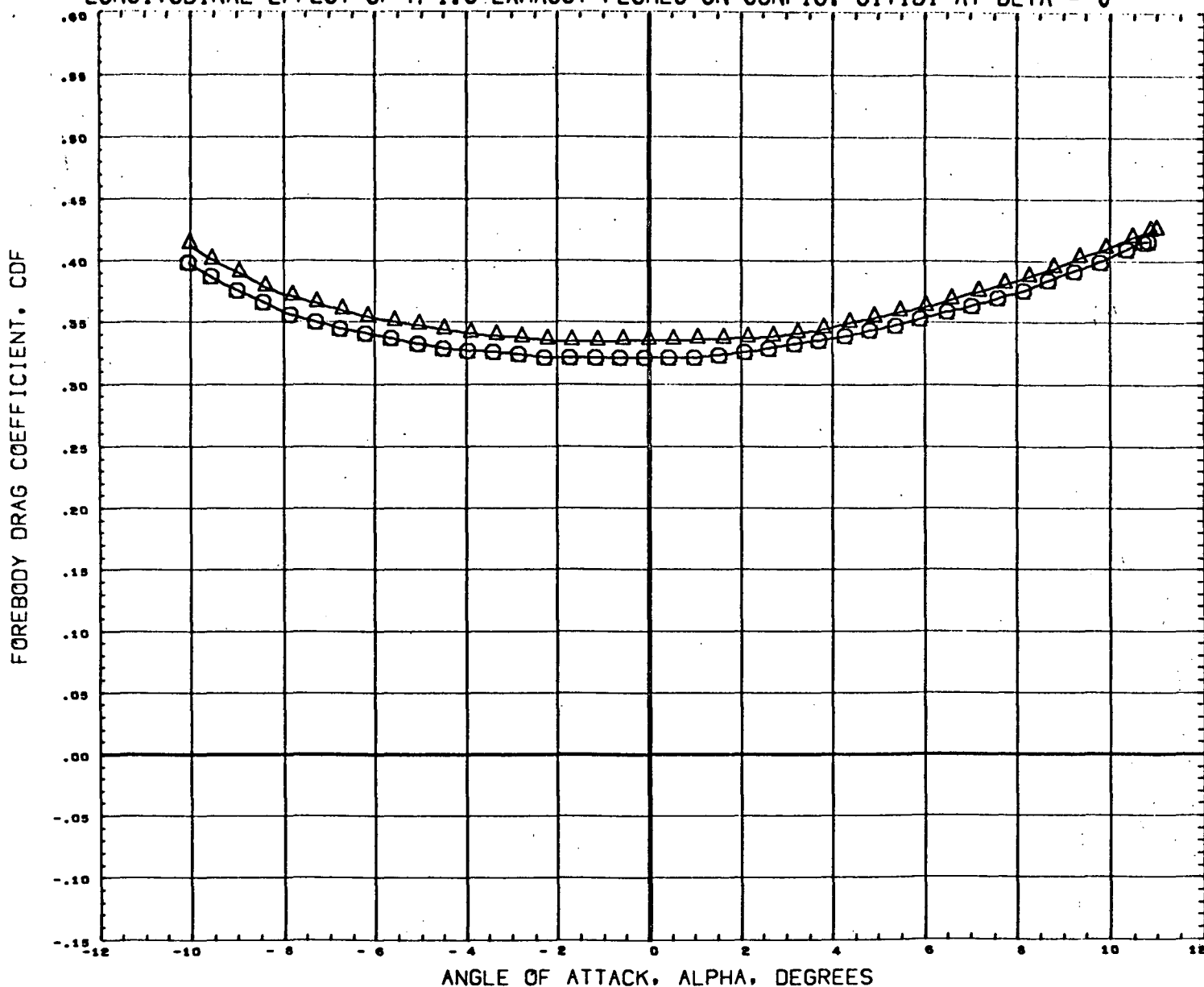


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7536)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0



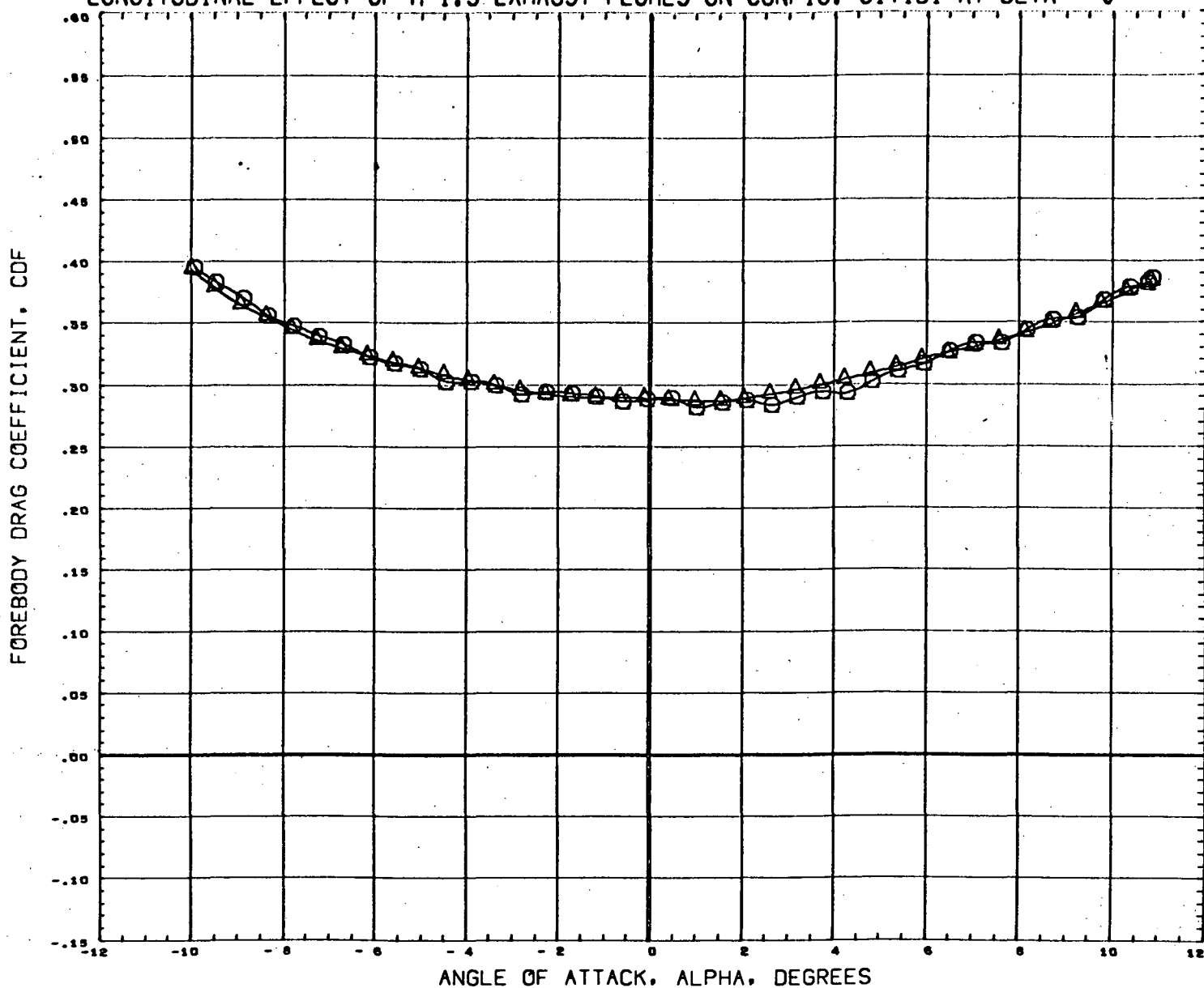
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07538)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1
(CD7538)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)

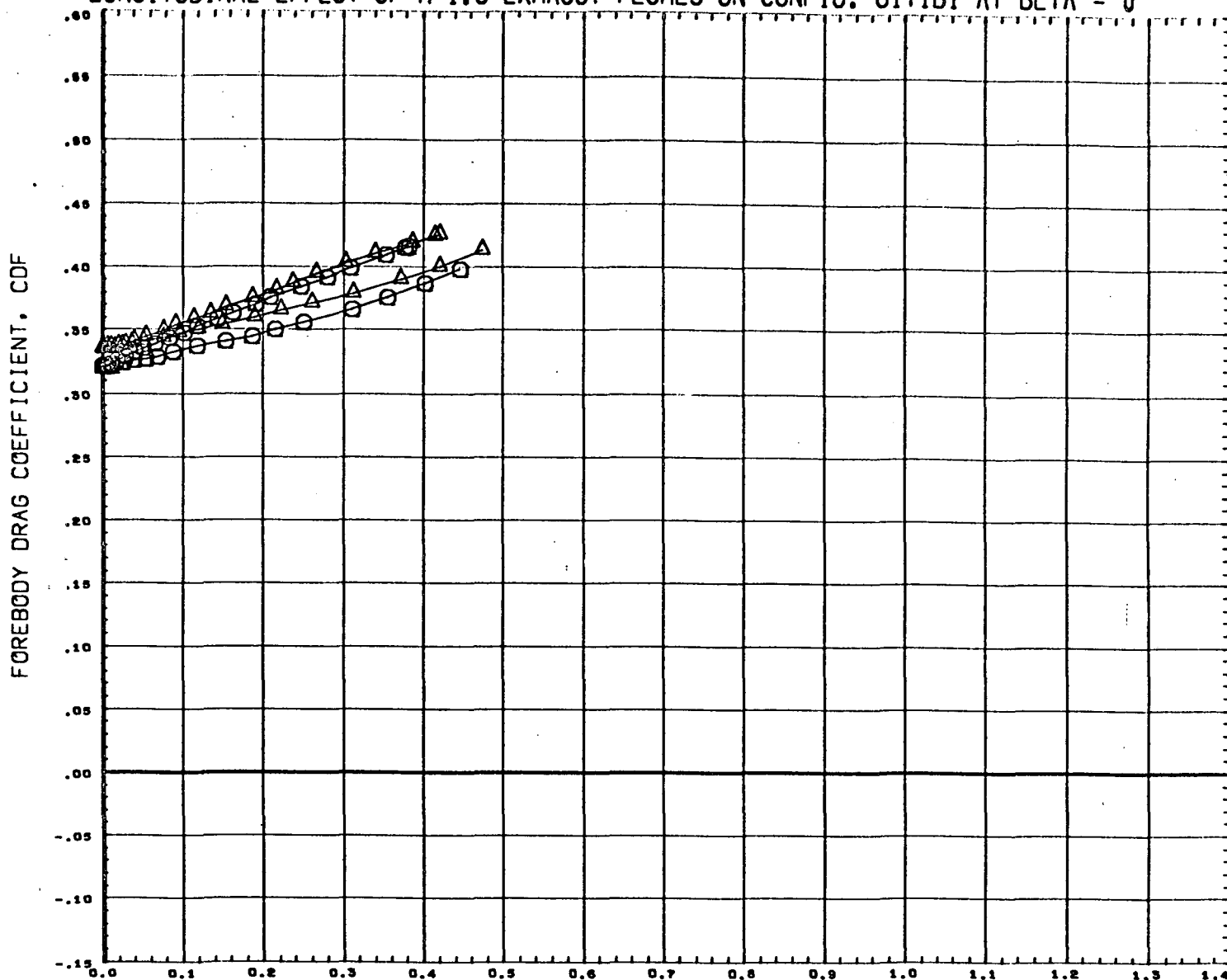
BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0



LIFT COEFFICIENT SQUARED, CLSQR

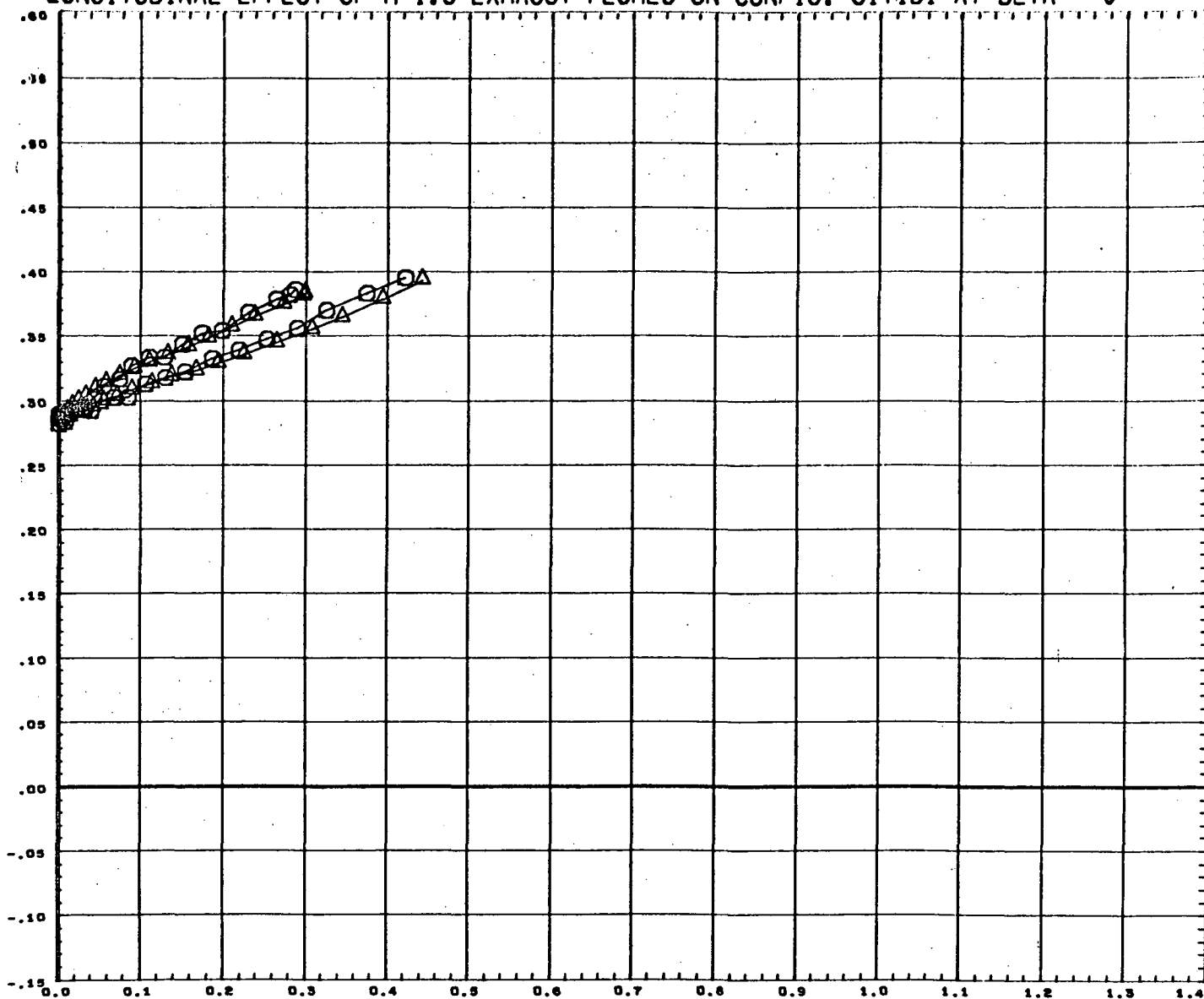
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7526)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3195.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQ

DATA SET SYMBOL      CONFIGURATION DESCRIPTION  
(CD7528)      ○      MDAC S-222 COMPOSITE(T-CG) 01T1B1  
(CD7536)      △      MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)

BETA      ELEVTR      AILRON      RUDDER  
0.000      0.000      0.000      0.000  
0.000      0.000      0.000      0.000

REFERENCE INFORMATION  
SREF      3155.3040      SQ.FT.  
LREF      609.5004      IN.  
BREF      682.0004      IN.  
XMRP      557.0004      IN.  
YMRP      0.0000      IN.  
ZMRP      200.0004      IN.  
SCALE      0.0060

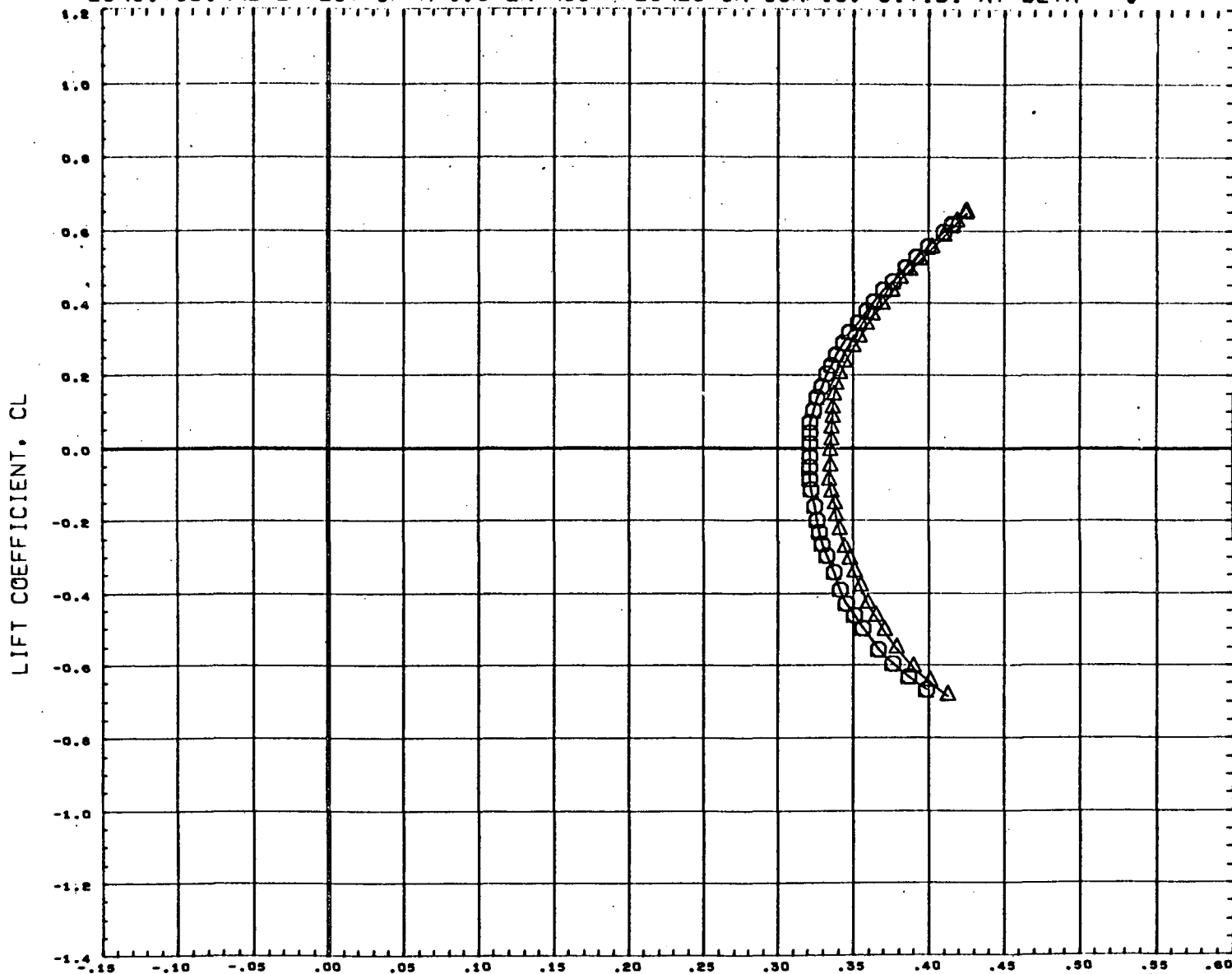
MACH

2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0



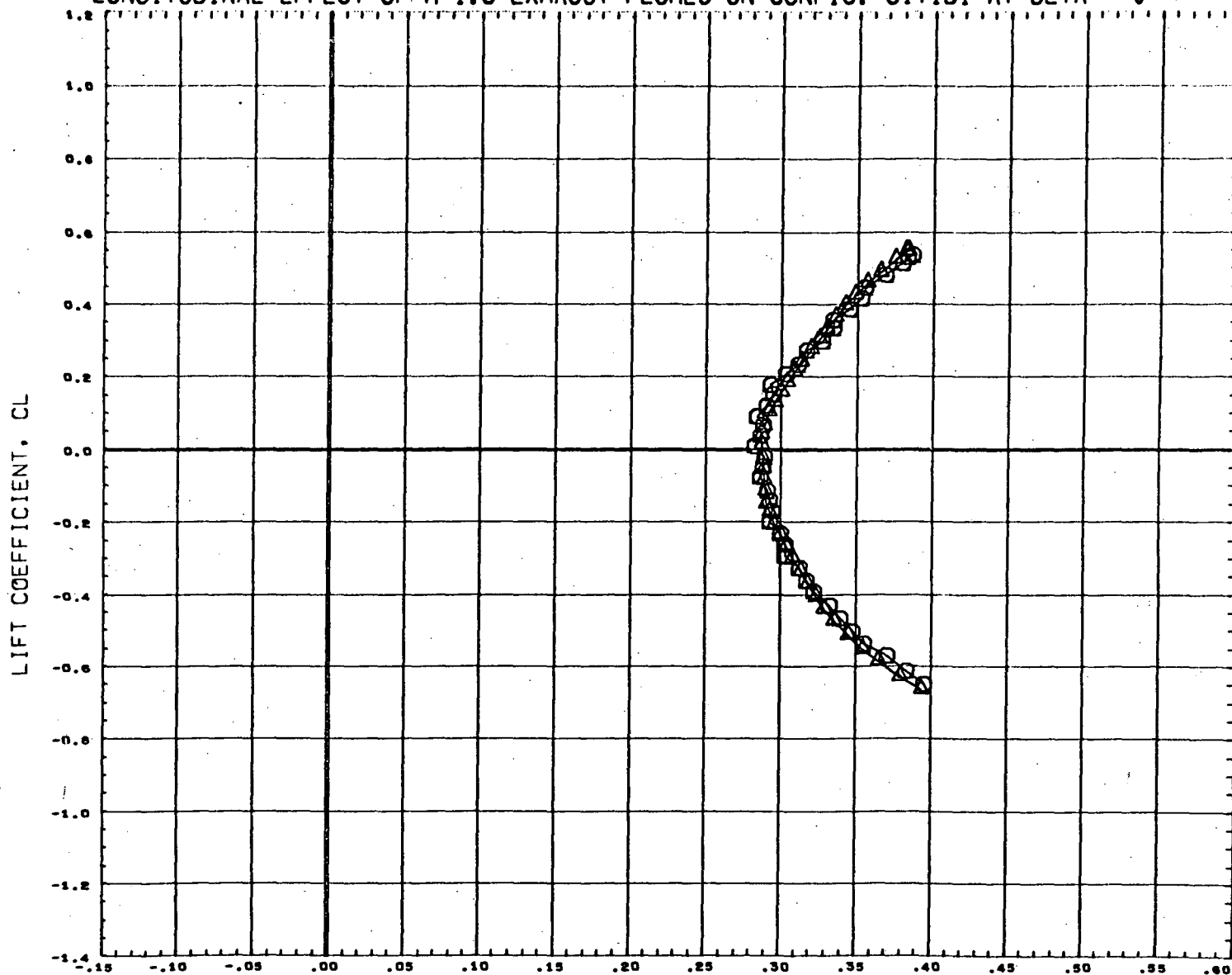
FOREBODY DRAG COEFFICIENT, CDF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0



FOREBODY DRAG COEFFICIENT, CDF

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7528) MDAC S-222 COMPOSITE(T-CG) 01T1B1  
(CD7538) MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)

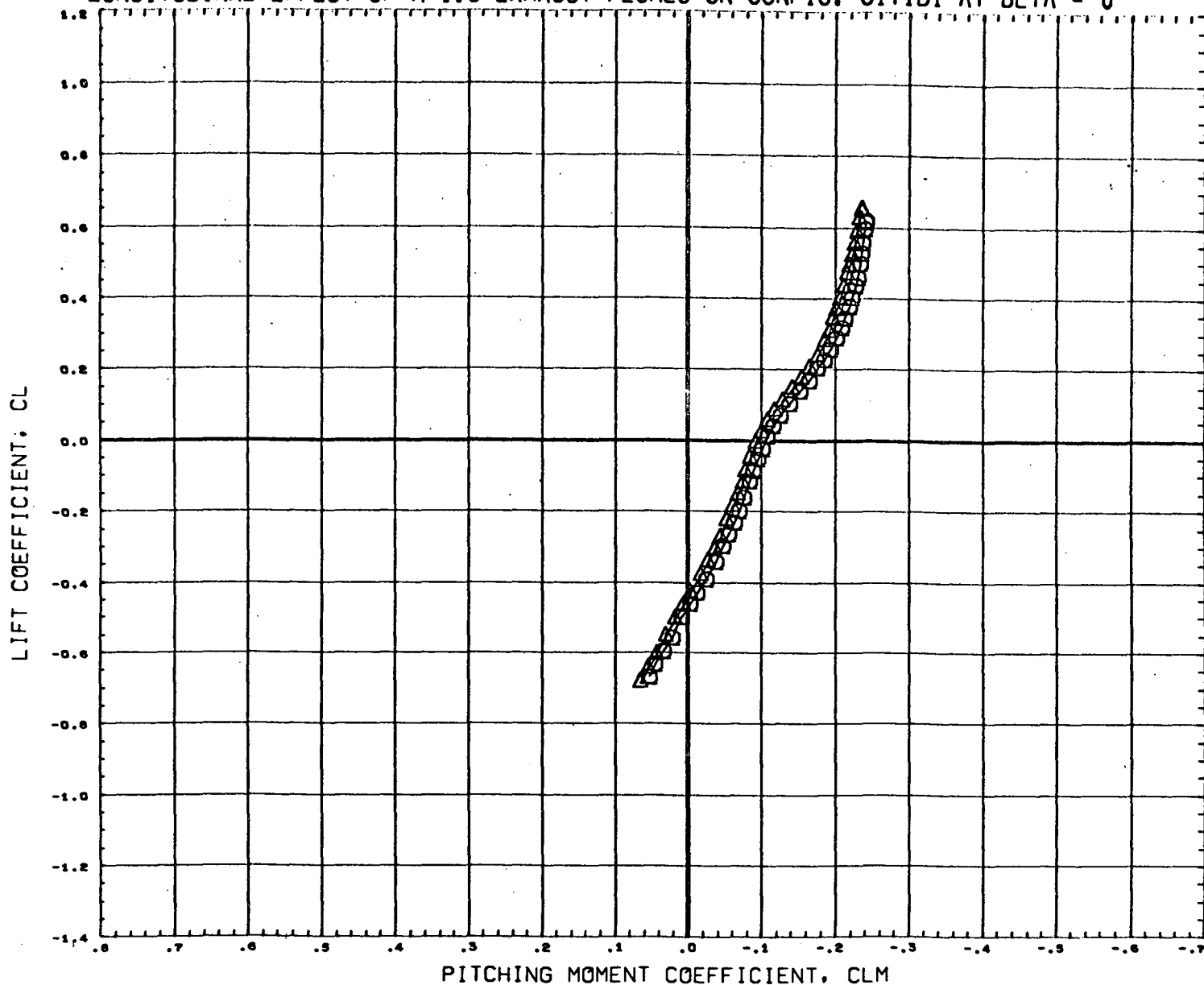
BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

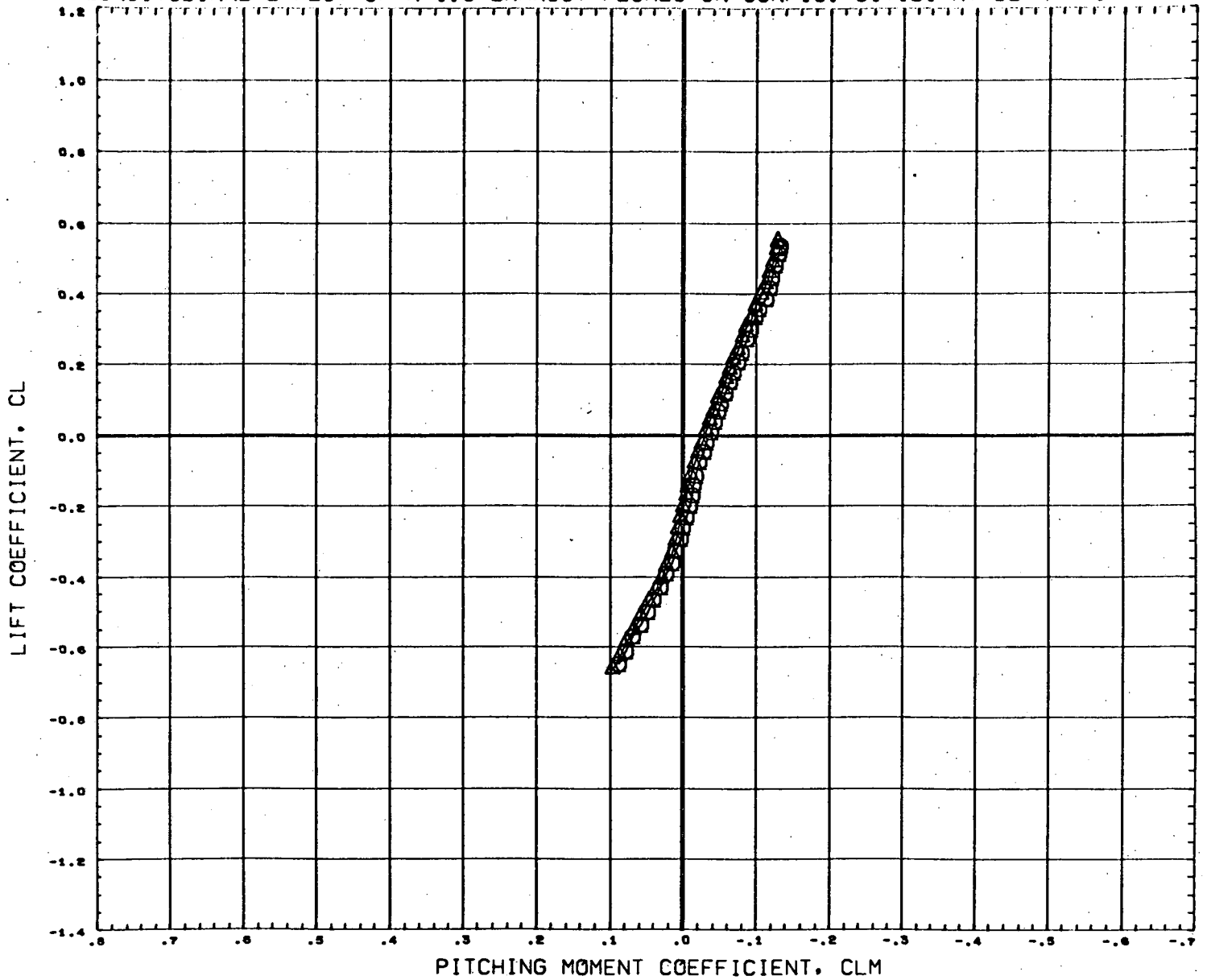


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7538)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT BETA = 0

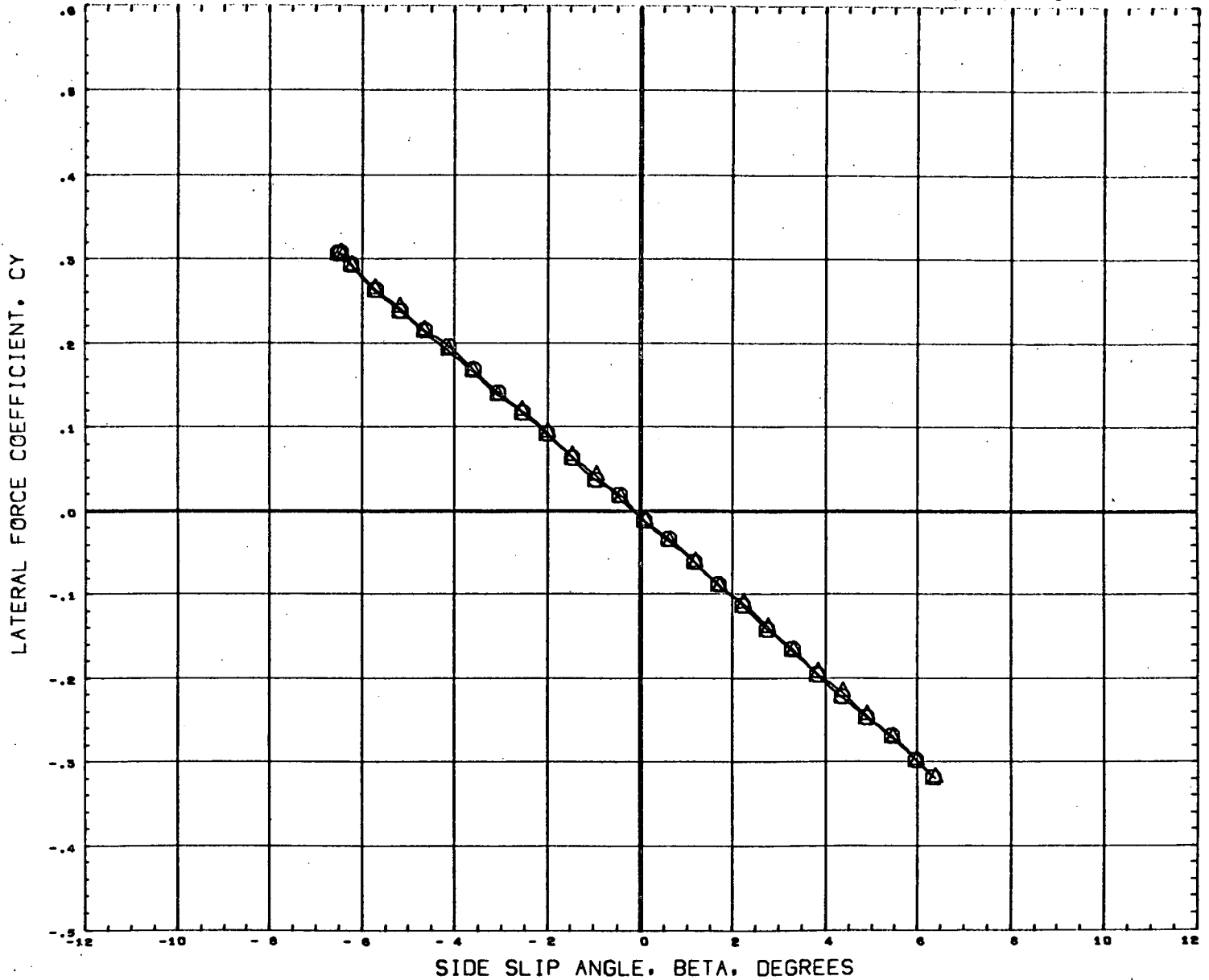


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7328)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7338)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMPP	557.0004 IN.
						YMPP	0.0000 IN.
						ZMPP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LAT-DIR. EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT ALPHA = 0



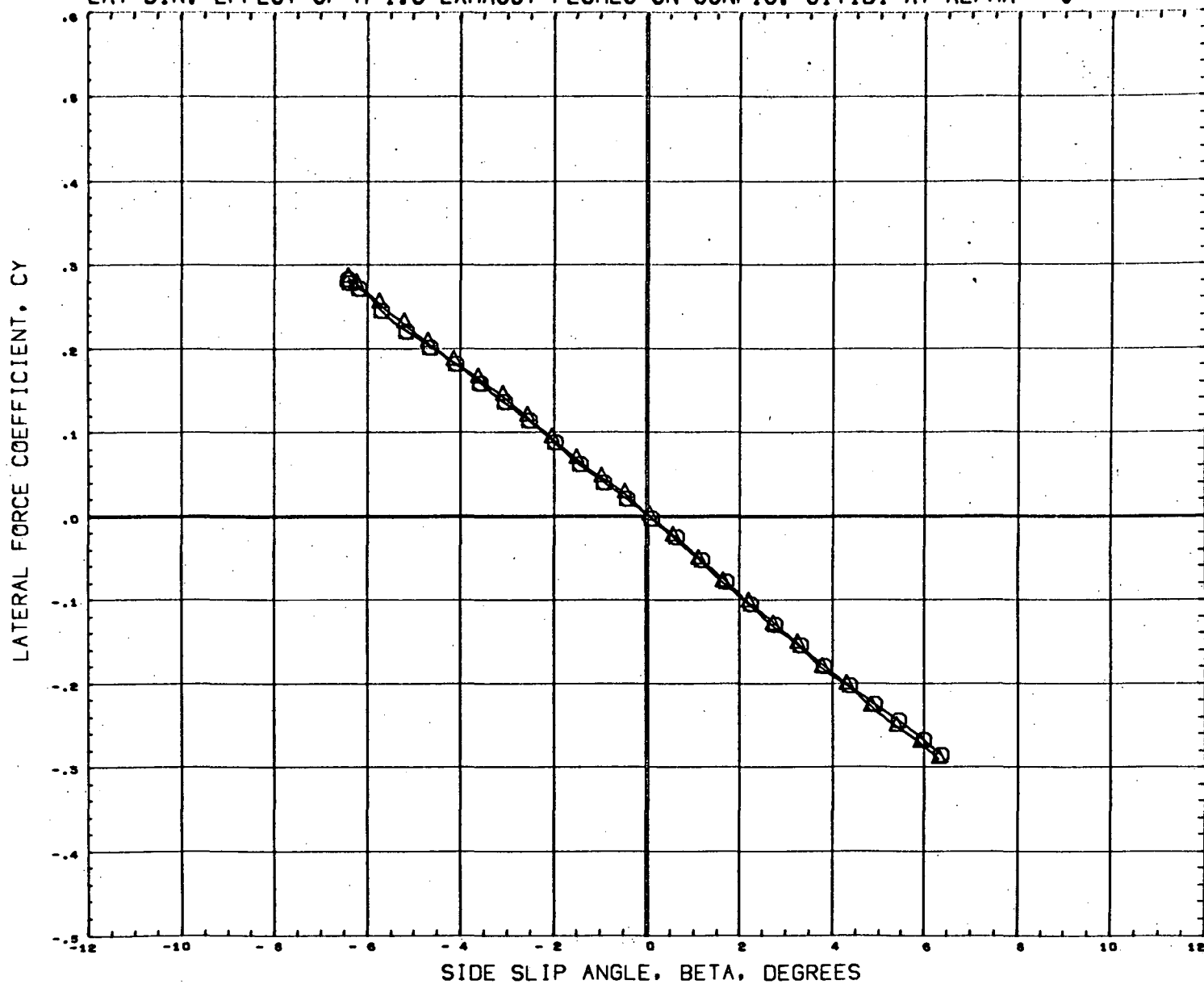
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3135.3040 SQ.FT.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT ALPHA = 0



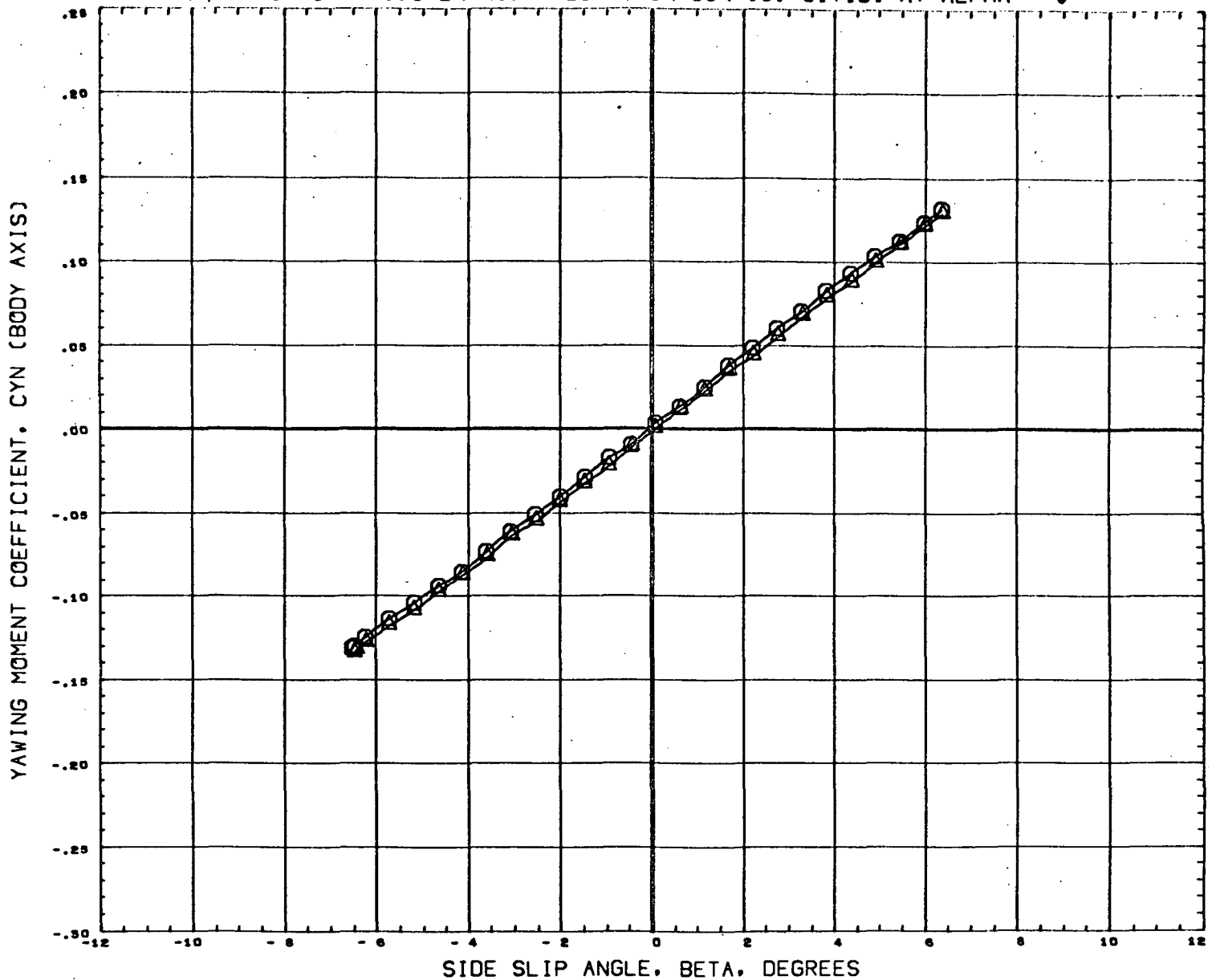
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RD7329)	MDAC S-222 COMPOSITE (T-C6) O1T1B1
(RD7339)	MDAC S-222 COMPOSITE (T-C6) O1T1B1+PLUME (1.5)

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# LAT-DIR. EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT ALPHA = 0

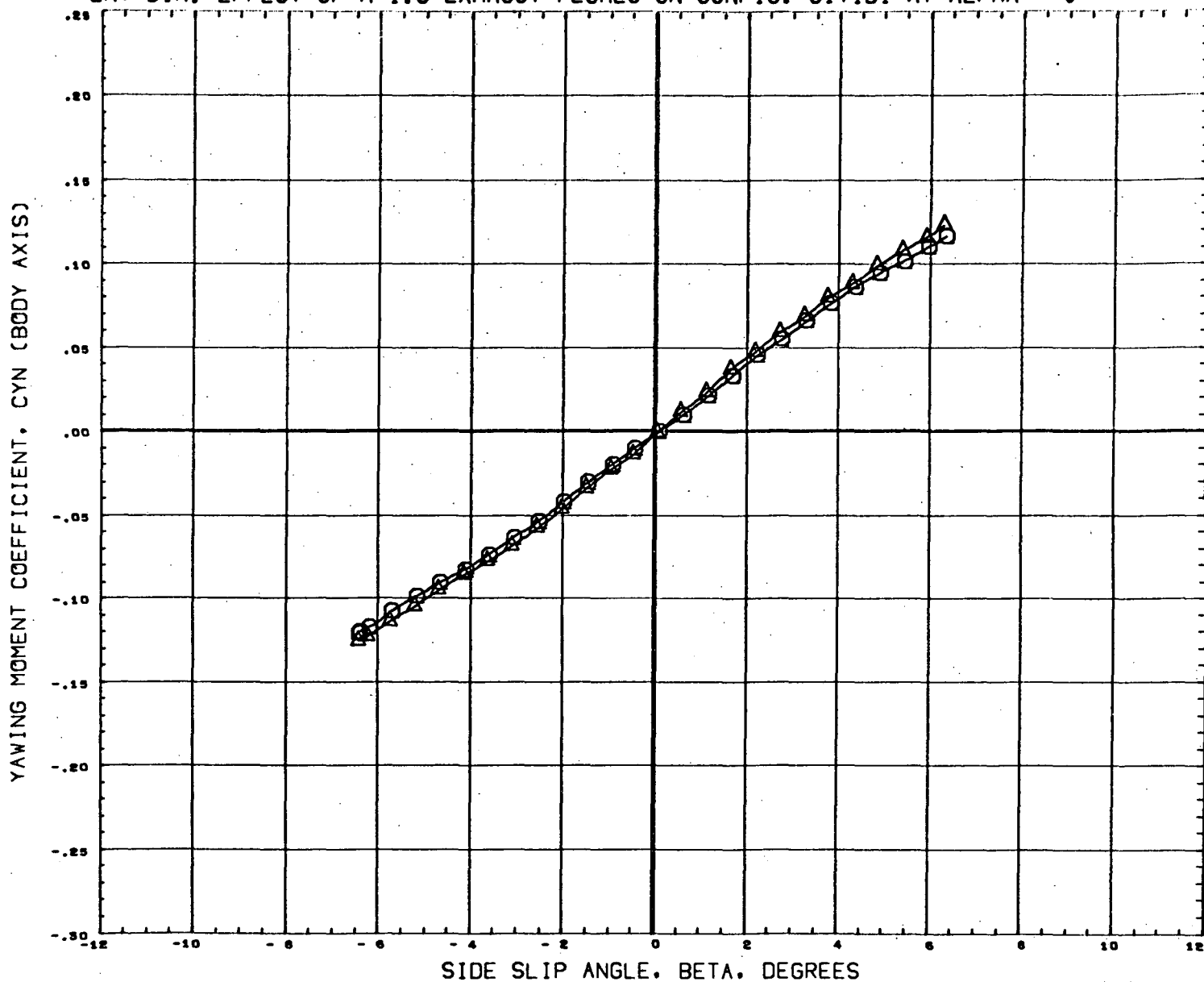


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7539)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMWP	557.0004 IN.
						YMWP	0.0000 IN.
						ZMWP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT ALPHA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3043 SQ.FT.
(RD7539)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.3004 IN.
						BREF	662.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

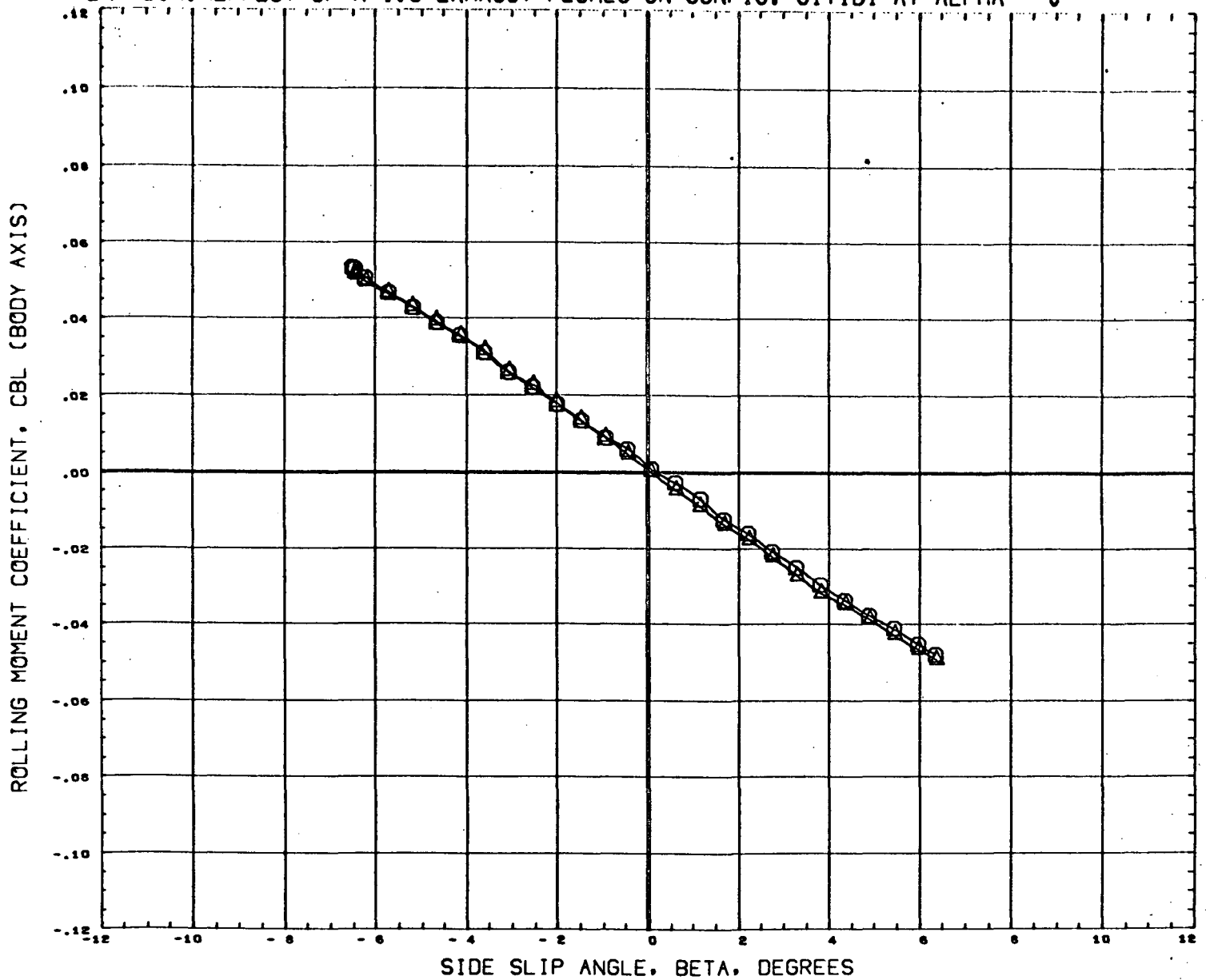
MACH

2.20

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# LAT-DIR. EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT ALPHA = 0

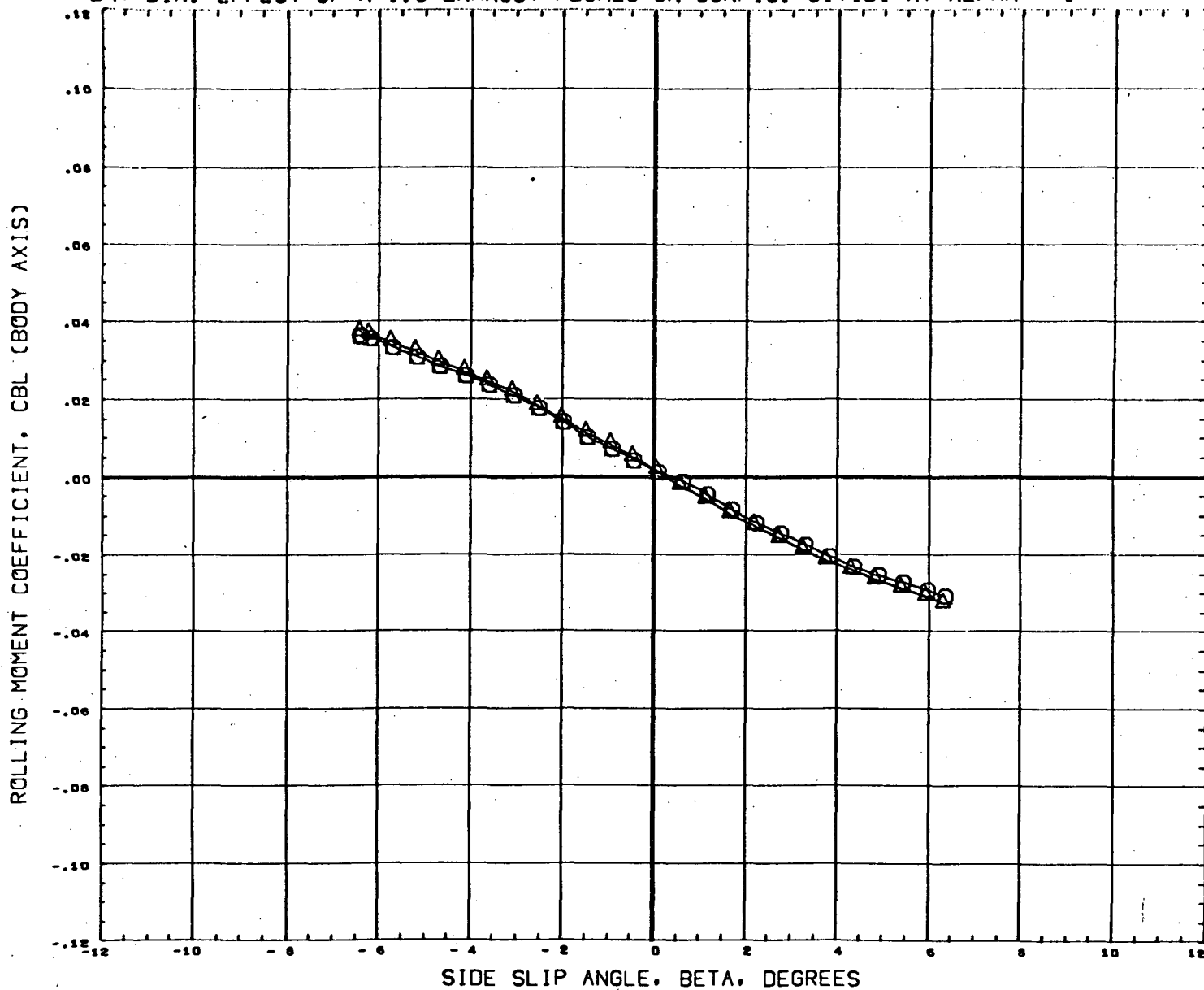


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7539)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT ALPHA = 0

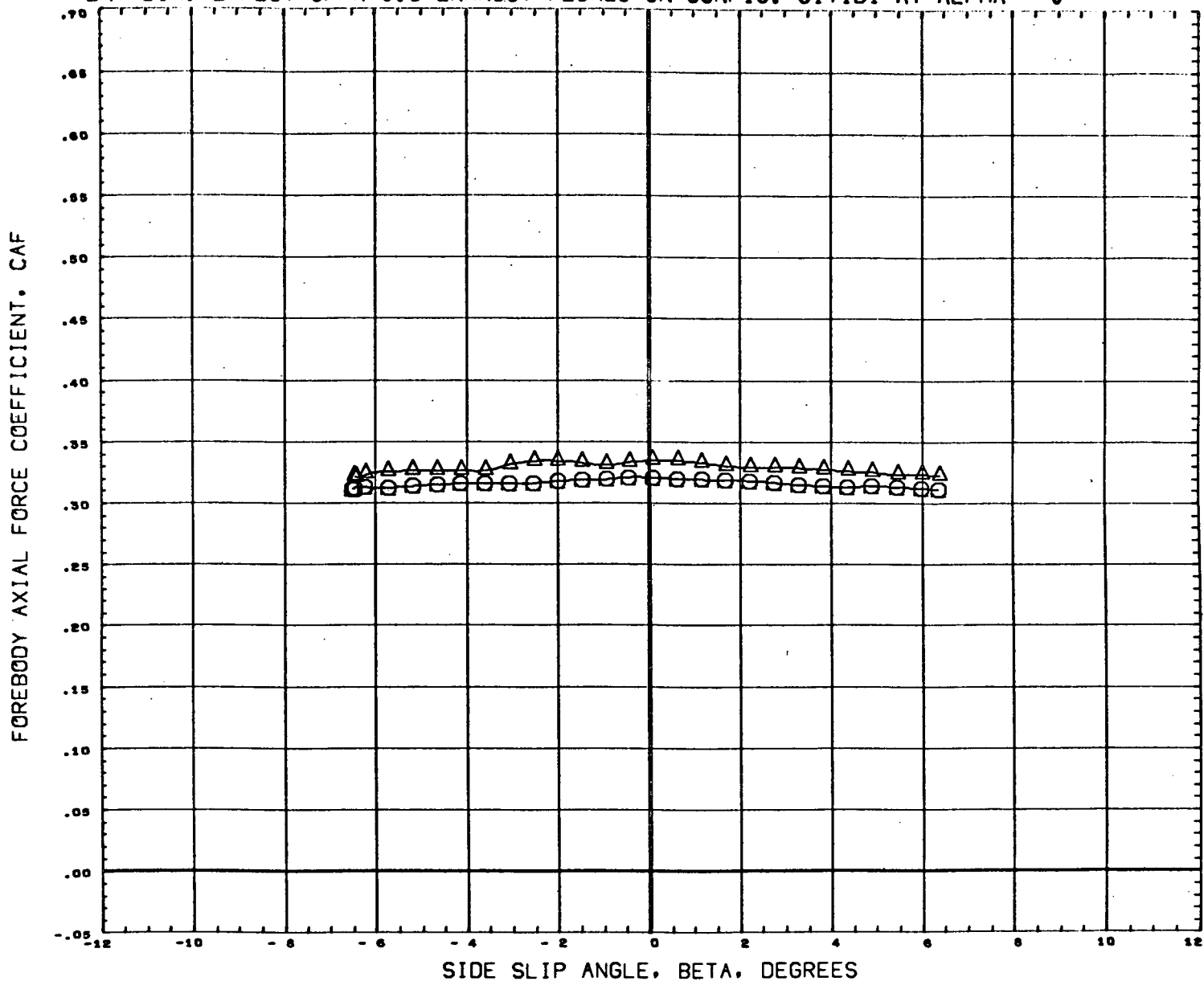


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE(T-C6) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7539)	MDAC S-222 COMPOSITE(T-C6) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LAT-DIR. EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT ALPHA = 0



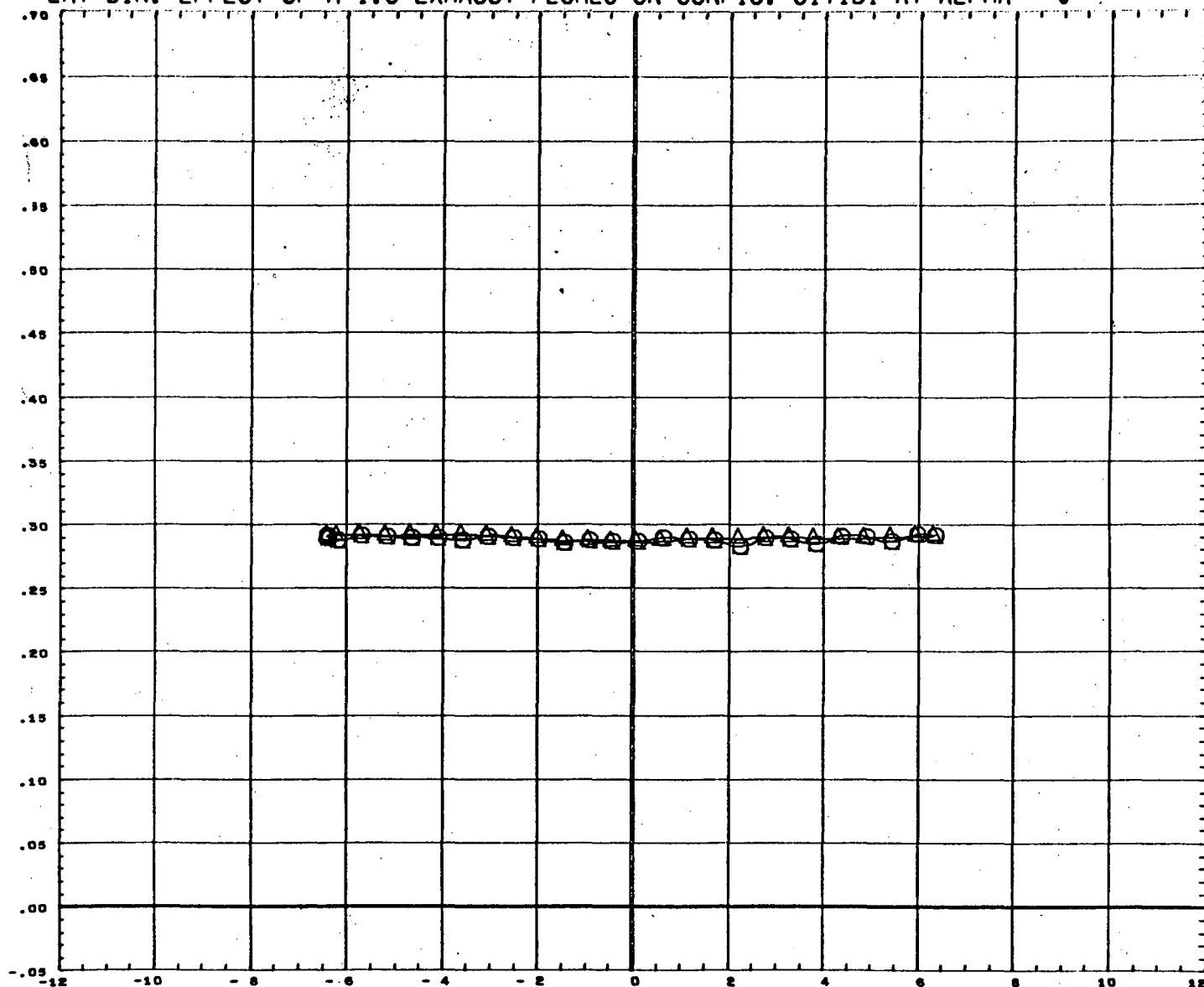
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7529)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7539)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004	IN.
						BREF	882.0004	IN.
						XMRF	557.0004	IN.
						YMRF	0.0000	IN.
						ZMRF	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# LAT-DIR. EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T1B1 AT ALPHA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



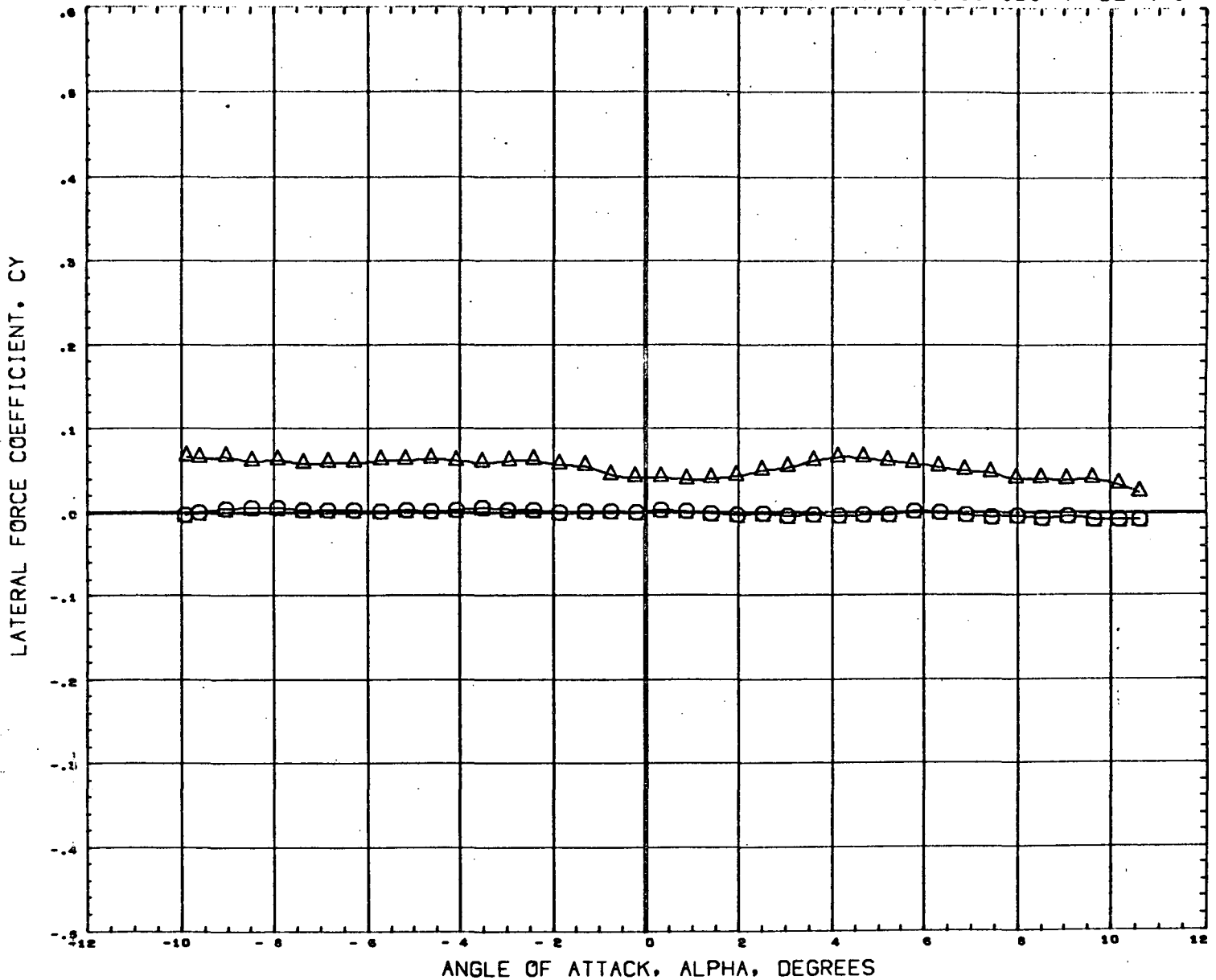
SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(R07529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(R07539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECT OF EXHAUST PLUMES ON AILERON EFFECTIVENESS OF CONFIG. 01T1B1 AT BETA=0



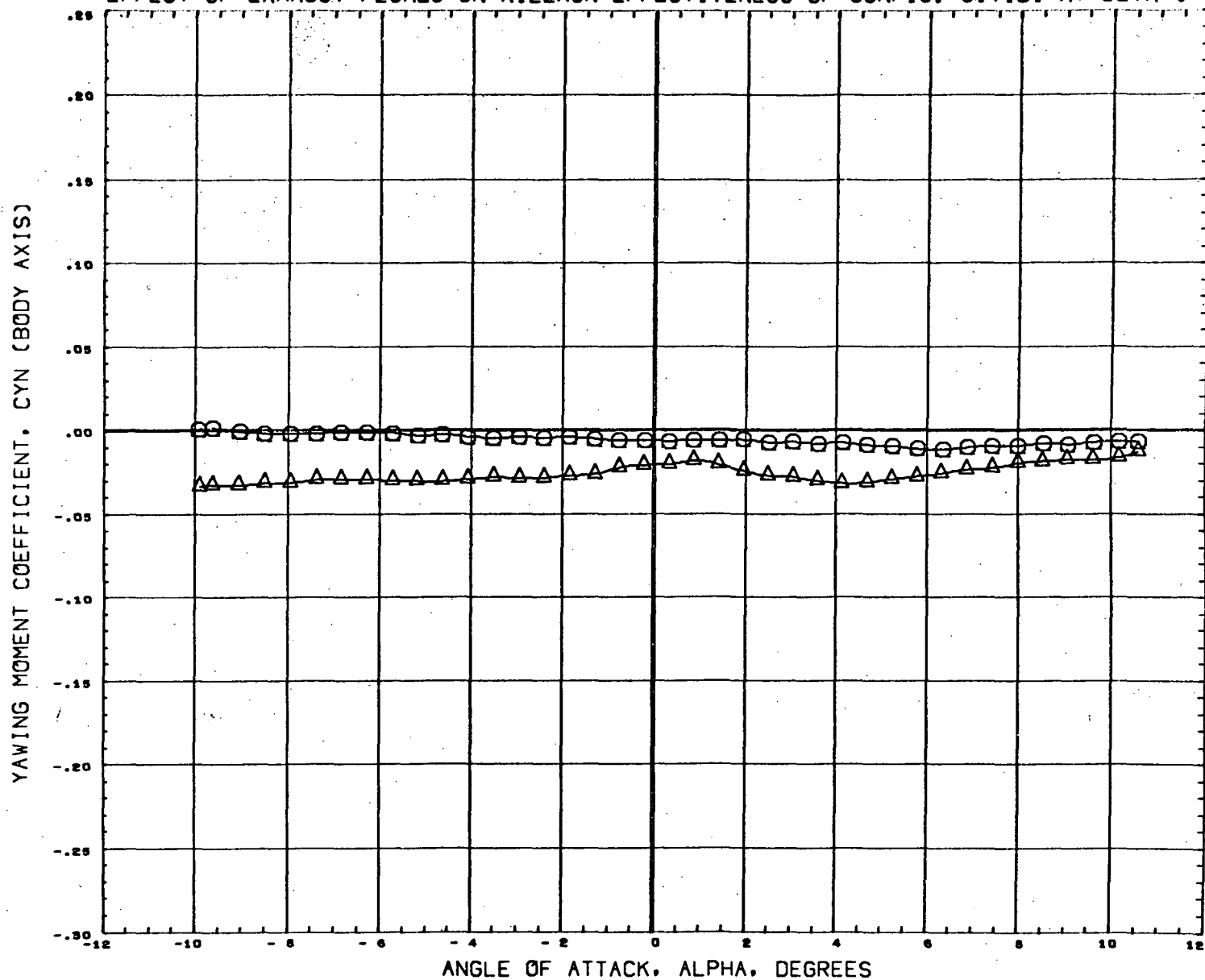
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RDY404)	MDAC S-222 COMPOSITE (T-C6) (01)T1B1	0.000	0.000	20.000	0.000	SREF	3155.3040 SQ.FT.
(RDY509)	MDAC S-222 COMPOSITE (T-C6) 01T1B1+PLUME (2.5)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECT OF EXHAUST PLUMES ON AILERON EFFECTIVENESS OF CONFIG. 01T1B1 AT BETA=0

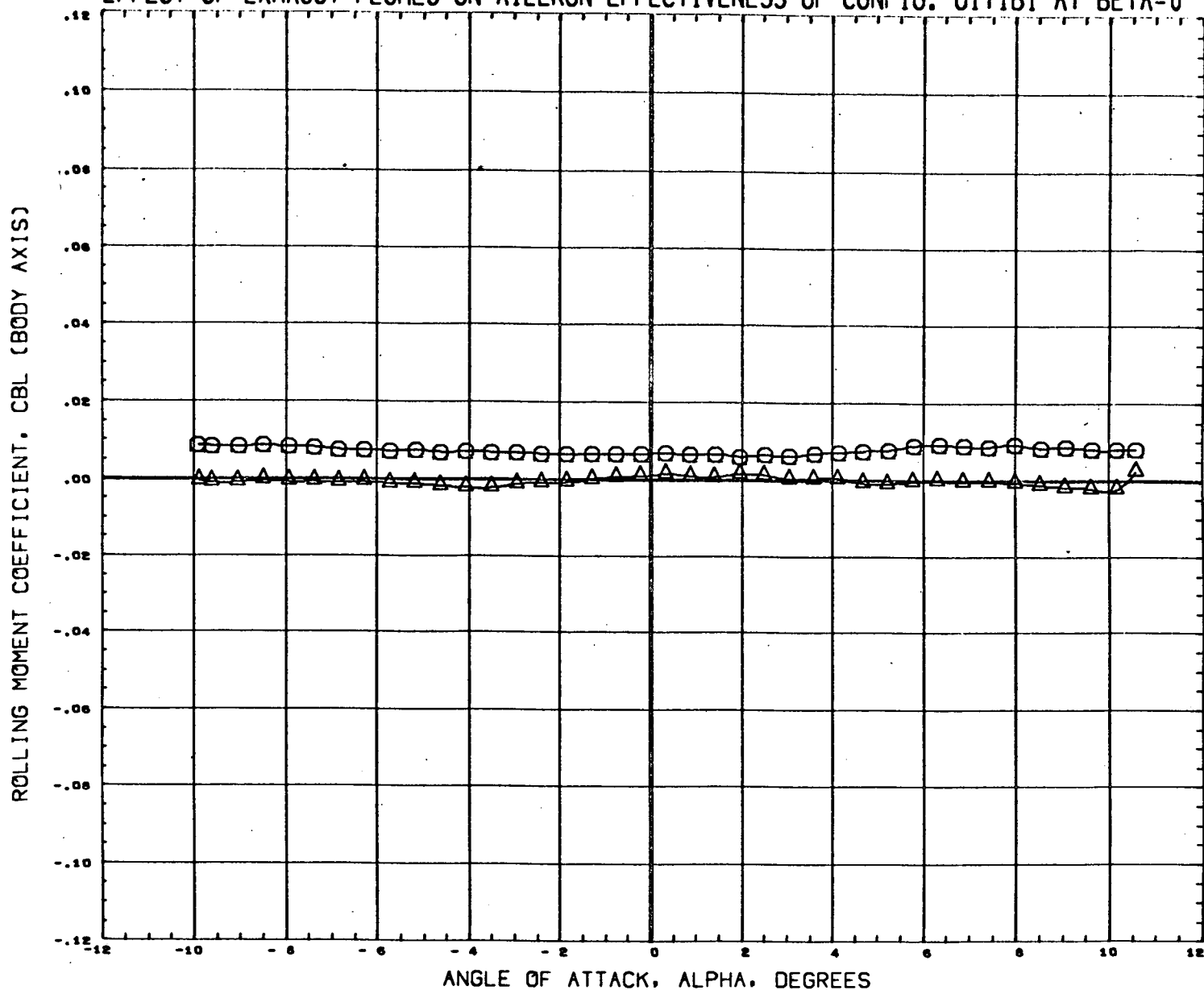


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7404)	MDAC S-222 COMPOSITE(T-CG) (O1)T1B1	0.000	0.000	20.000	0.000	SREF	3155.3040 SQ.FT.
(RD7509)	MDAC S-222 COMPOSITE(T-CG) O1T1B1+PLUME(2.5)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECT OF EXHAUST PLUMES ON AILERON EFFECTIVENESS OF CONFIG. 01T1B1 AT BETA=0

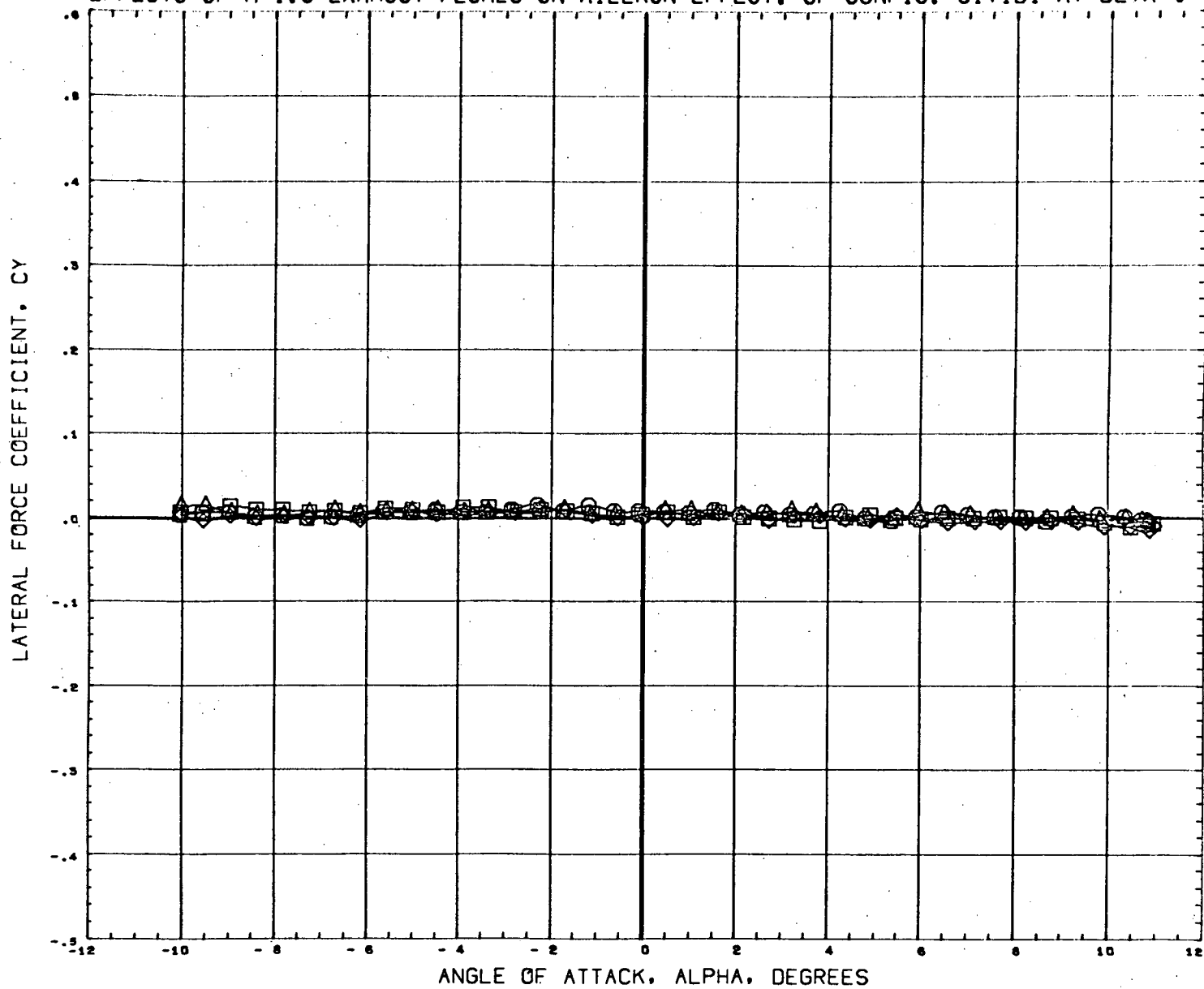


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD74P4)	MDAC S-222 COMPOSITE(T-CG) (O1)T1B1	0.000	0.000	20.000	0.000	SREF	3155.3040 SQ.FT.
(RD75P9)	MDAC S-222 COMPOSITE(T-CG) O1T1B1+PLUME(2,3)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T1B1 AT BETA=0

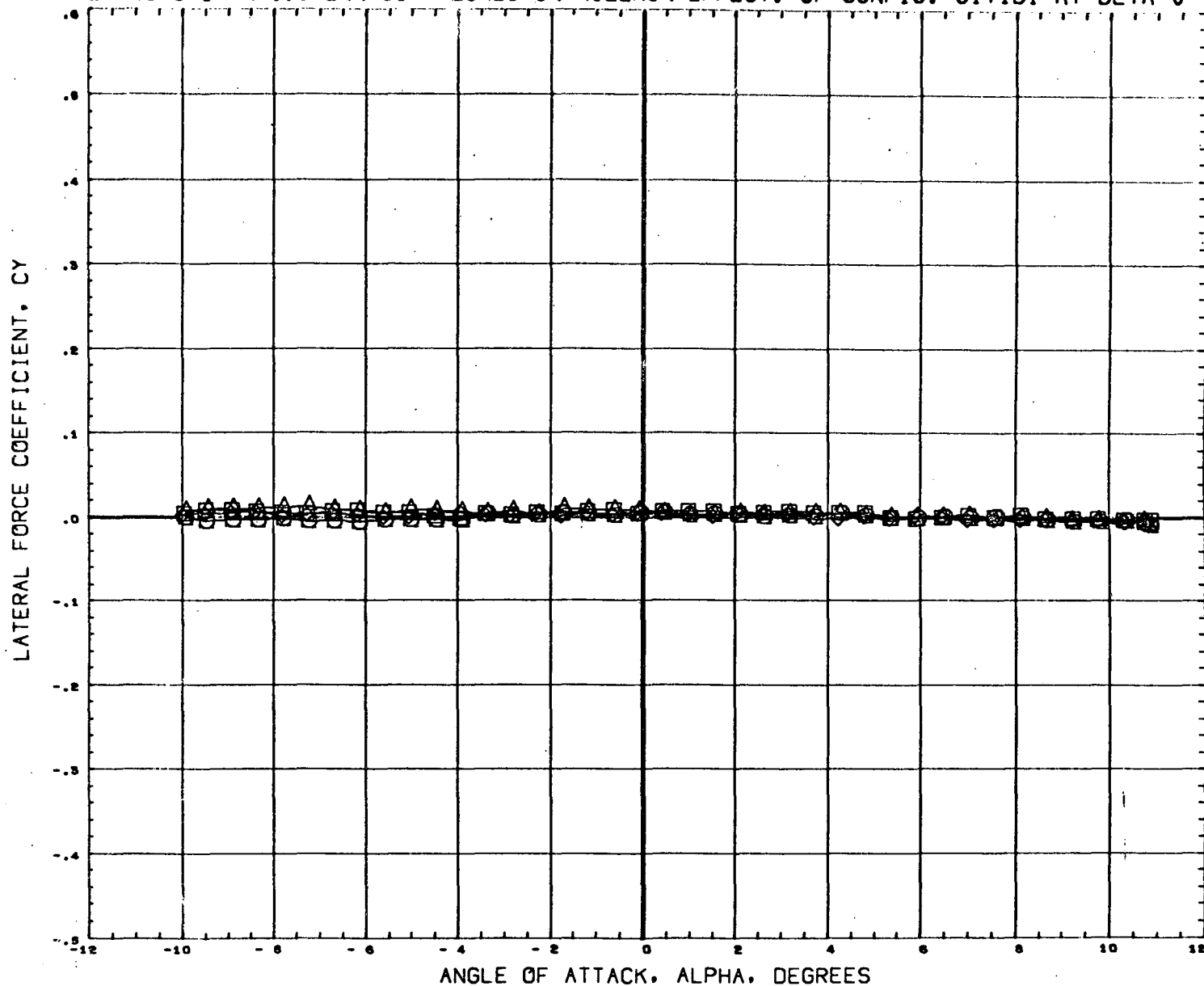


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7528)	MDAC S-222 COMPOSITE (T-CG) O1T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7530)	MDAC S-222 COMPOSITE (T-CG) O1T1B1	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(RD7538)	MDAC S-222 COMPOSITE (T-CG) O1T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004	IN.
(RD7540)	MDAC S-222 COMPOSITE (T-CG) O1T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T1B1 AT BETA=0

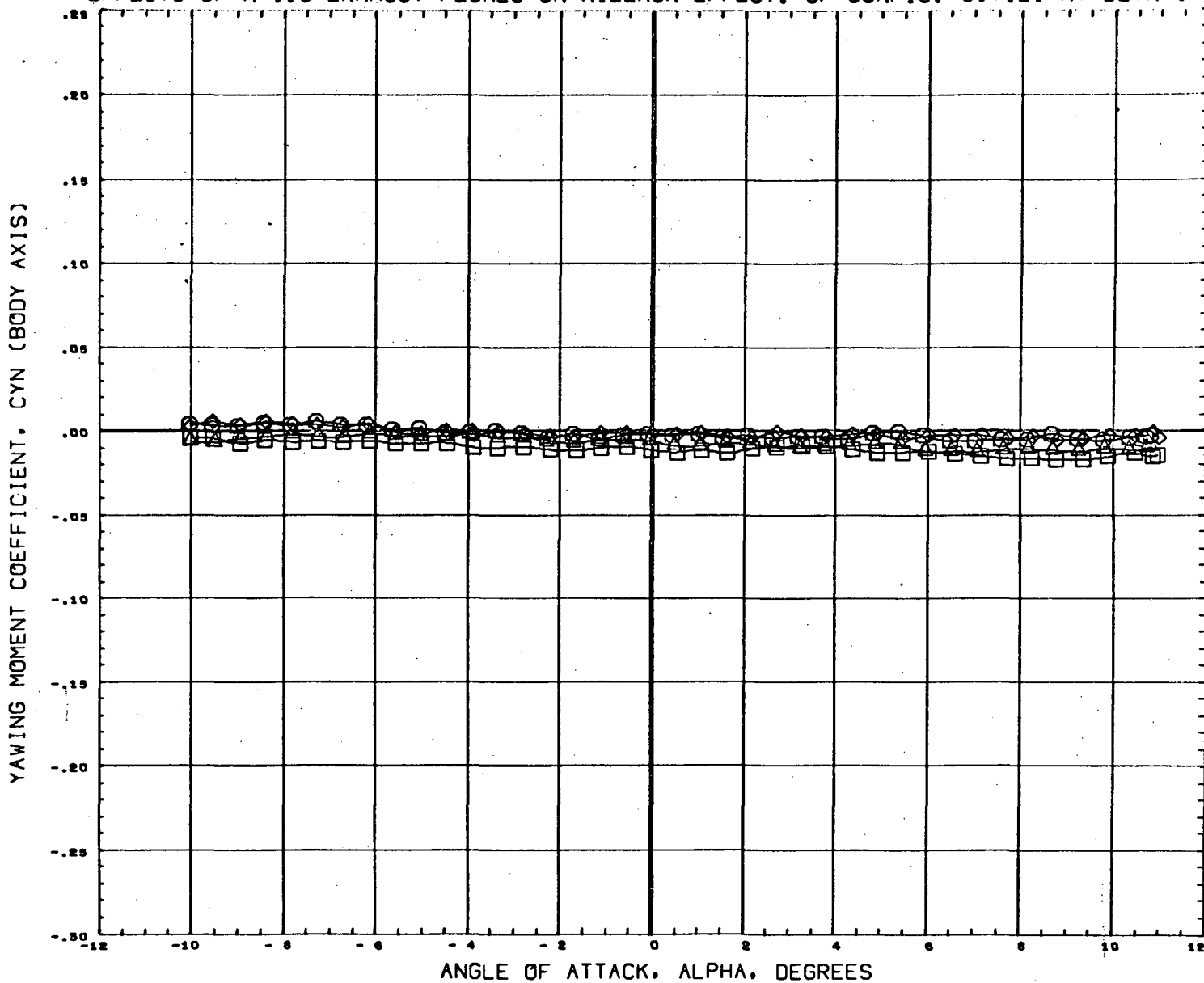


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7530)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7536)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	662.0004 IN.
(RD7540)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T1B1 AT BETA=0

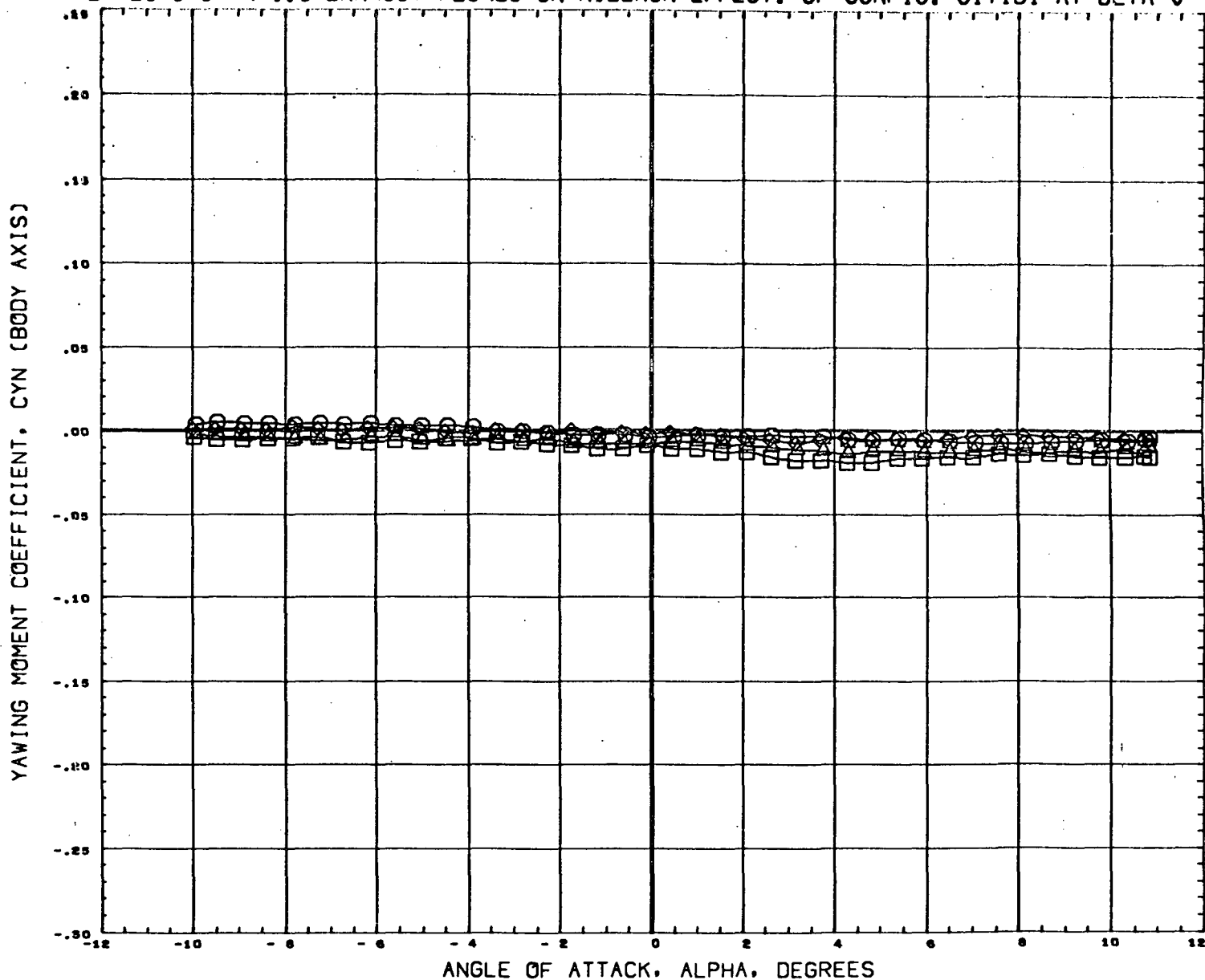


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7528)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7530)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7536)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7540)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T1B1 AT BETA=0

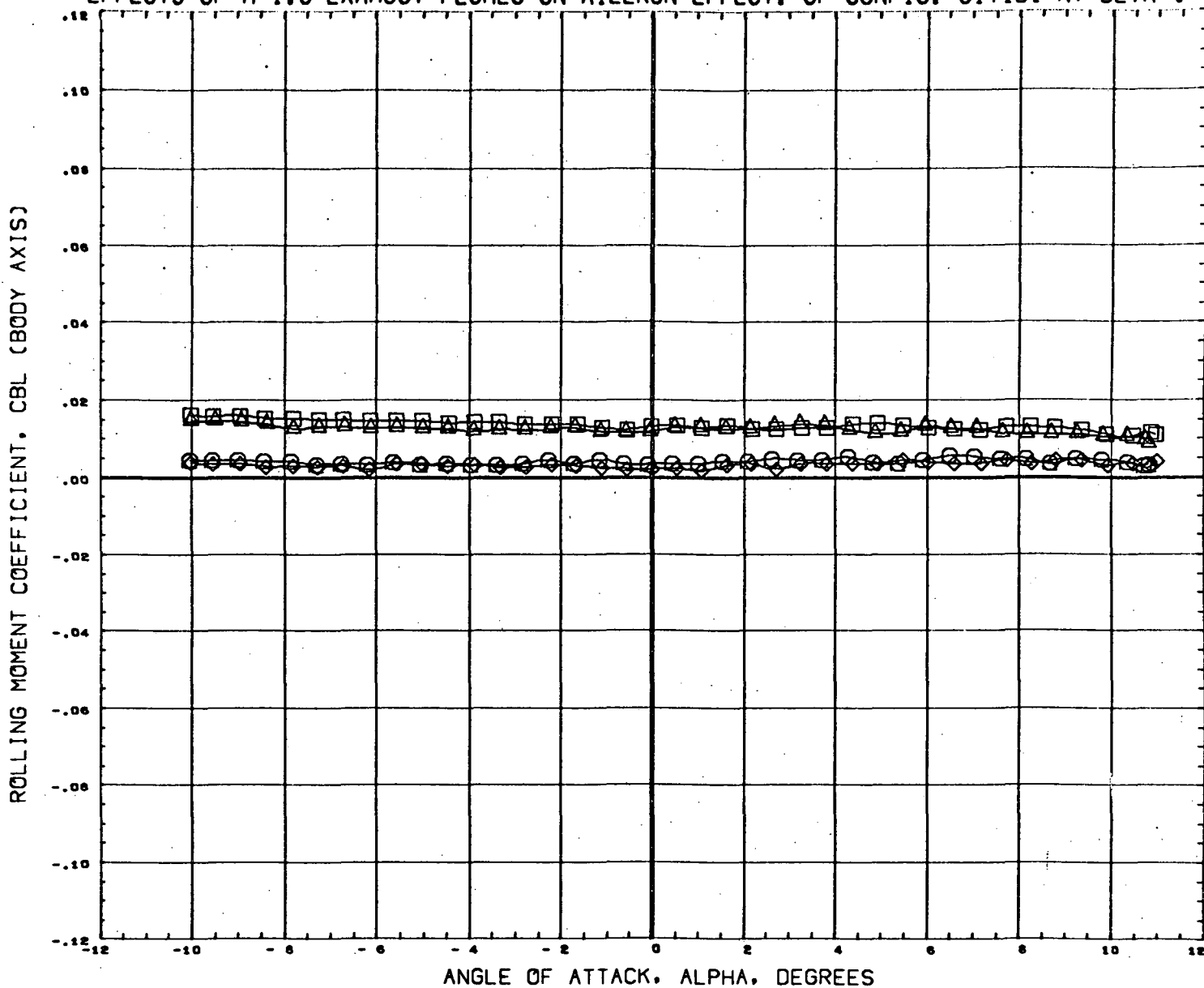


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7528)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7530)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(RD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	662.0004	IN.
(RD7540)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T1B1 AT BETA=0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7528)	MDAC S-222 COMPOSITE (T-CG) O1T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7530)	MDAC S-222 COMPOSITE (T-CG) O1T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7538)	MDAC S-222 COMPOSITE (T-CG) O1T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7540)	MDAC S-222 COMPOSITE (T-CG) O1T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

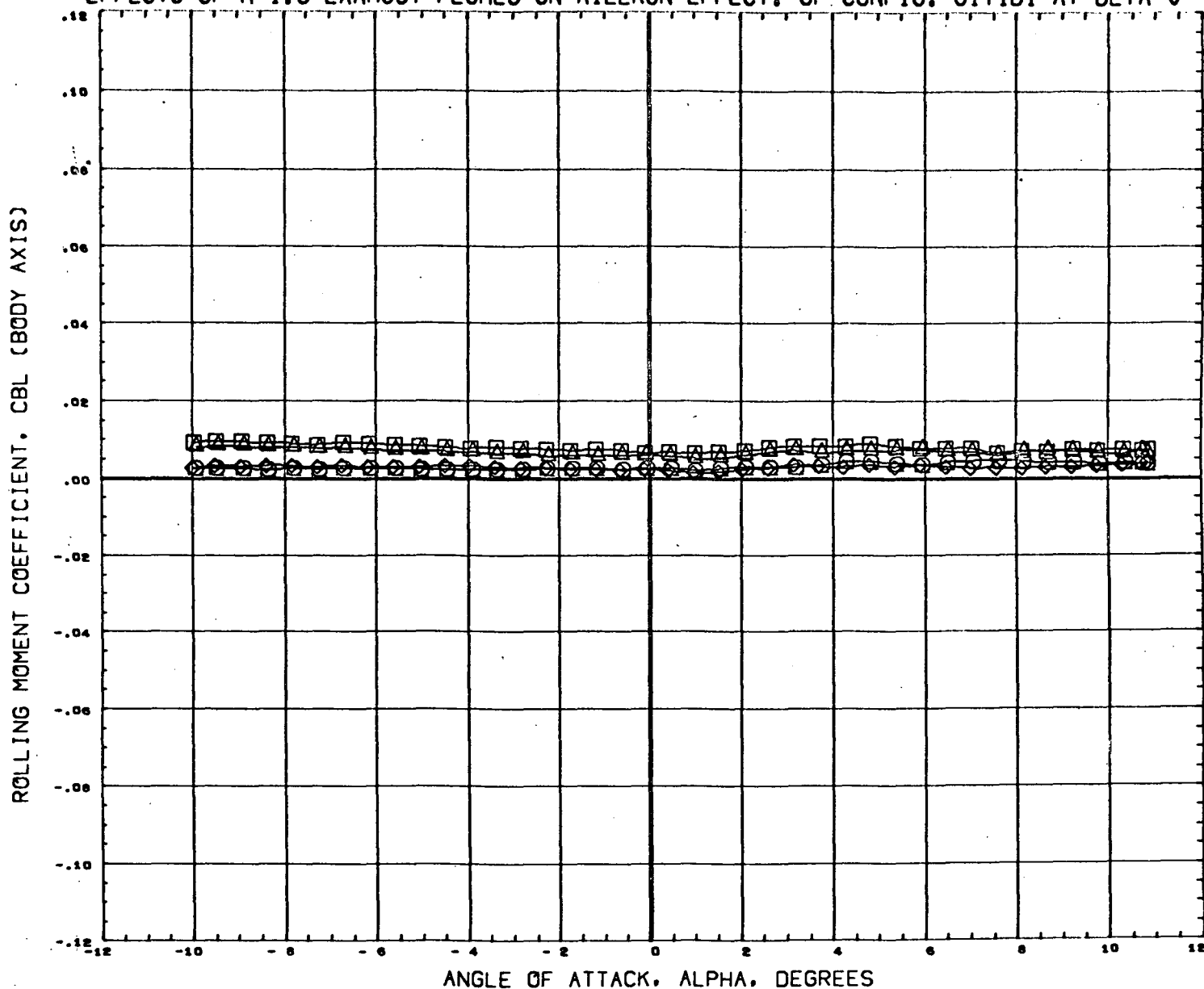
MACH

1.51

PAGE

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T1B1 AT BETA=0



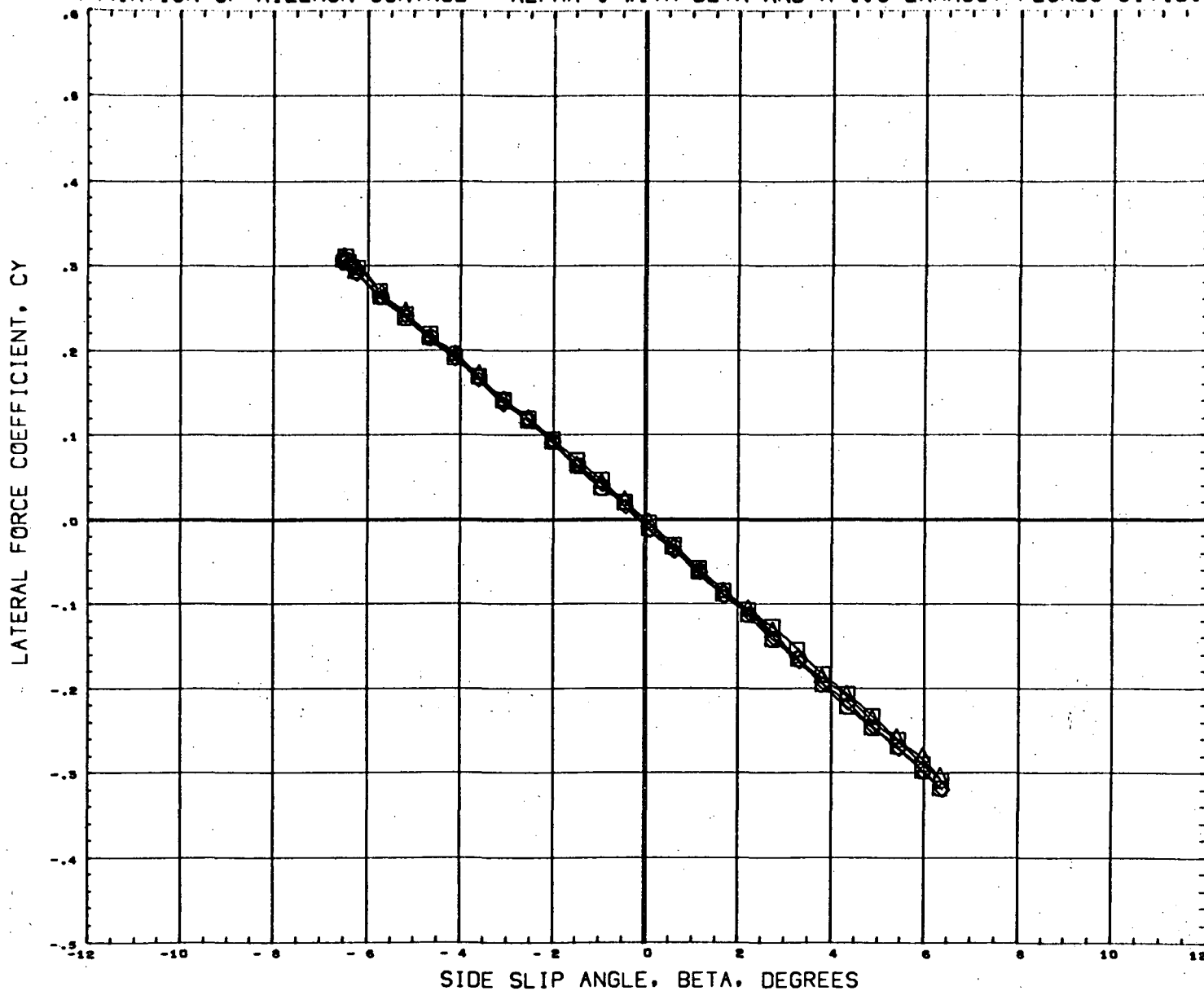
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7526)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7530)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7540)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T1B1

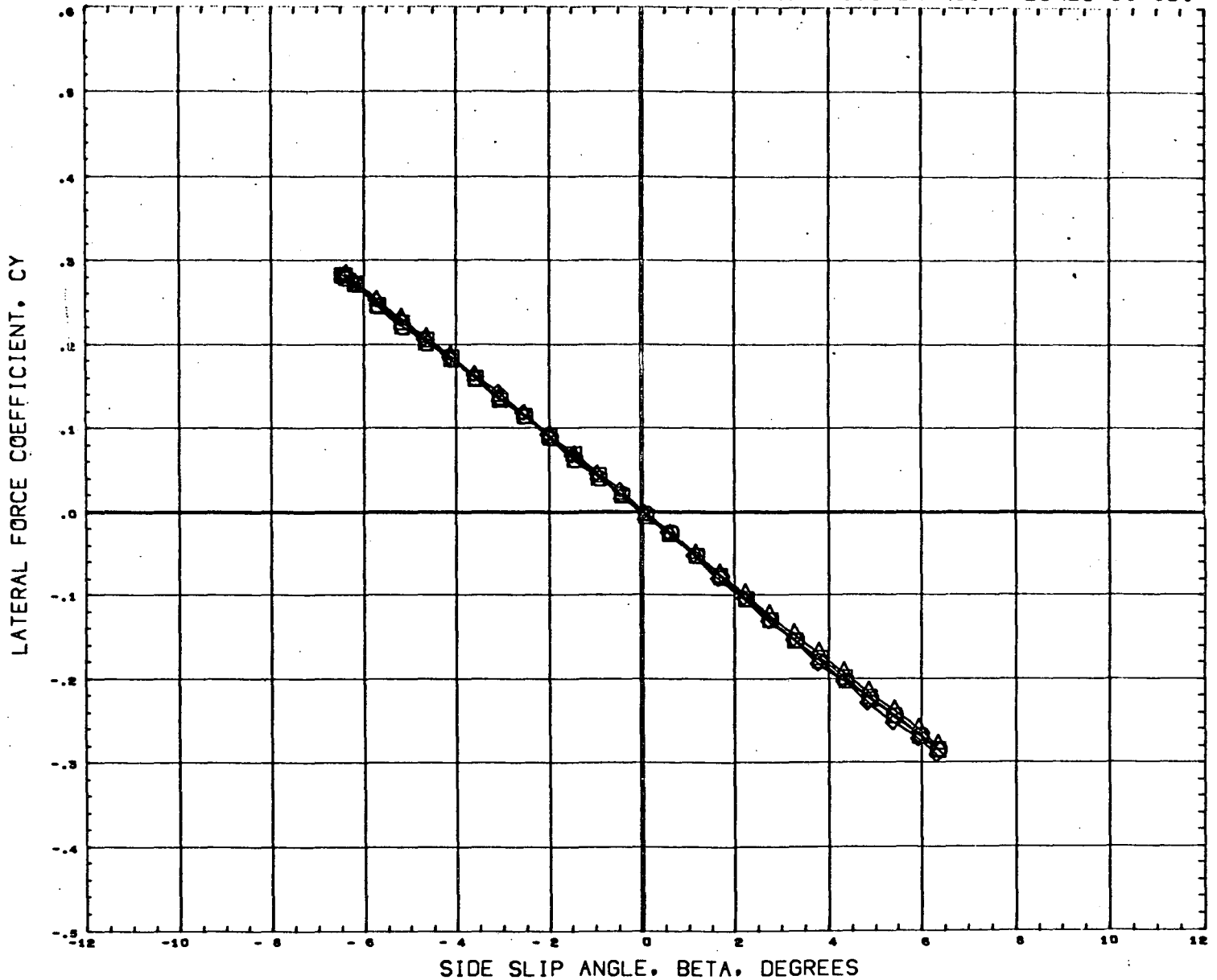


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7531)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7541)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T1B1

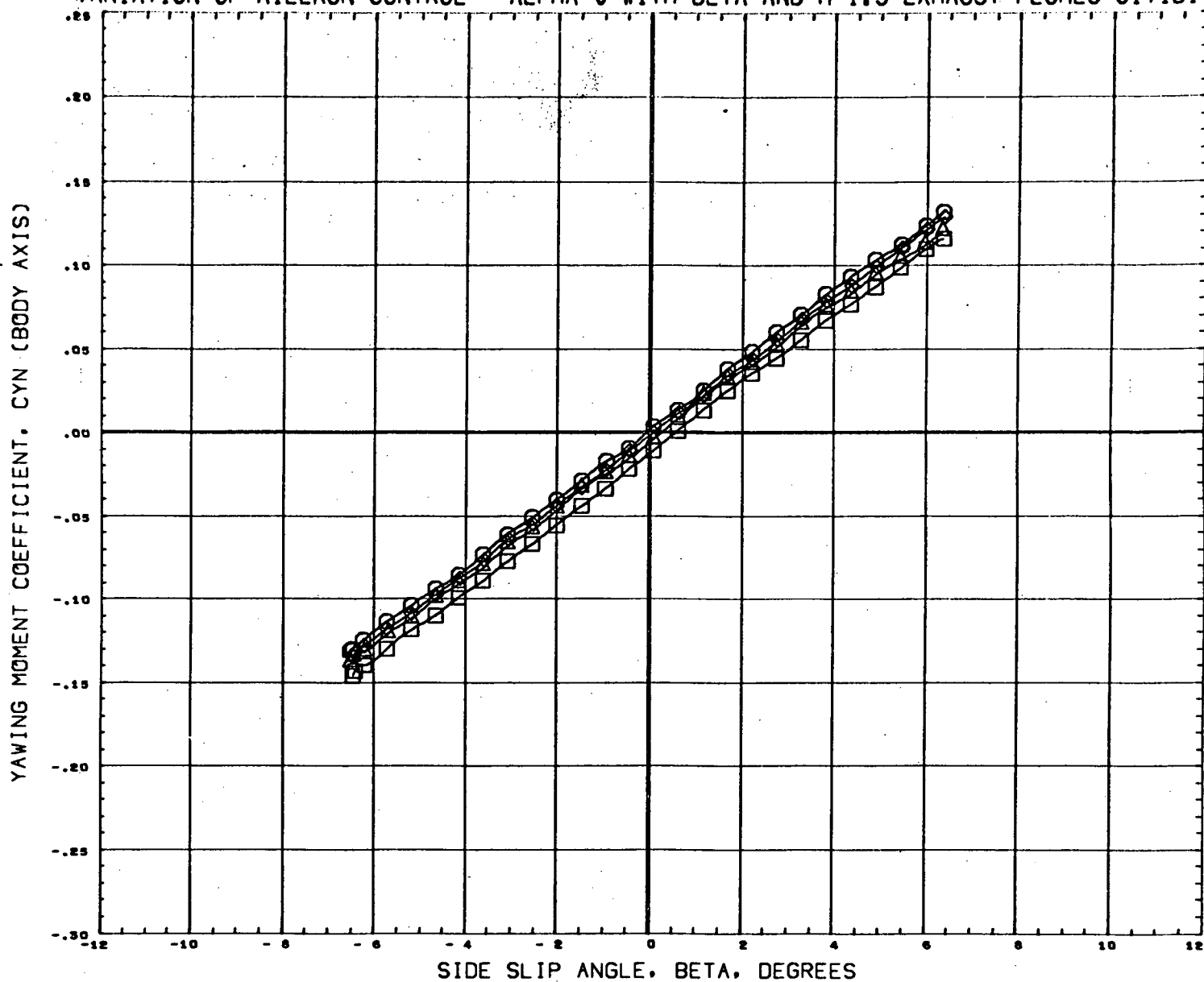


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7531)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7541)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T1B1

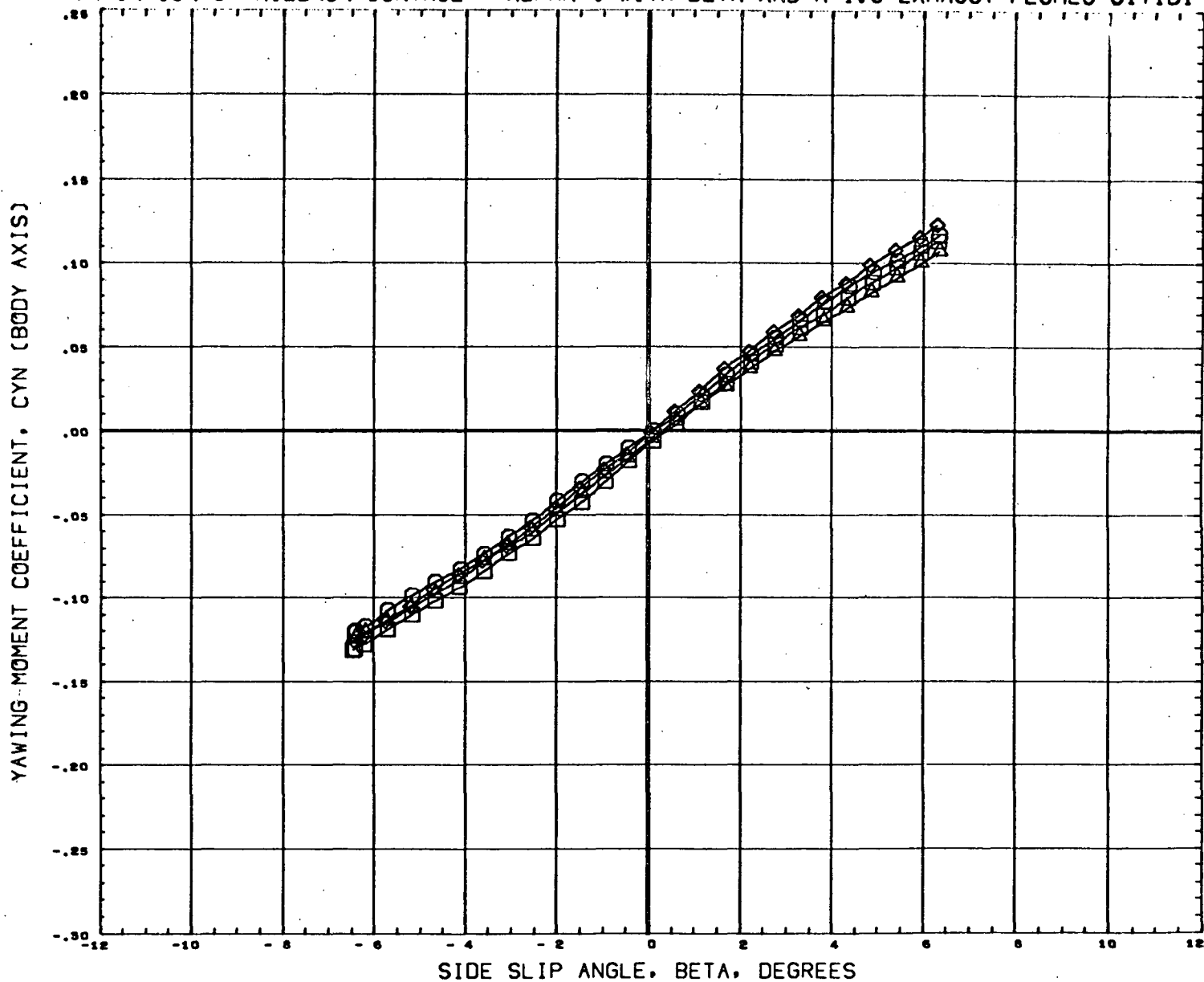


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(R07529)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(R07531)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(R07539)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(R07541)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T1B1

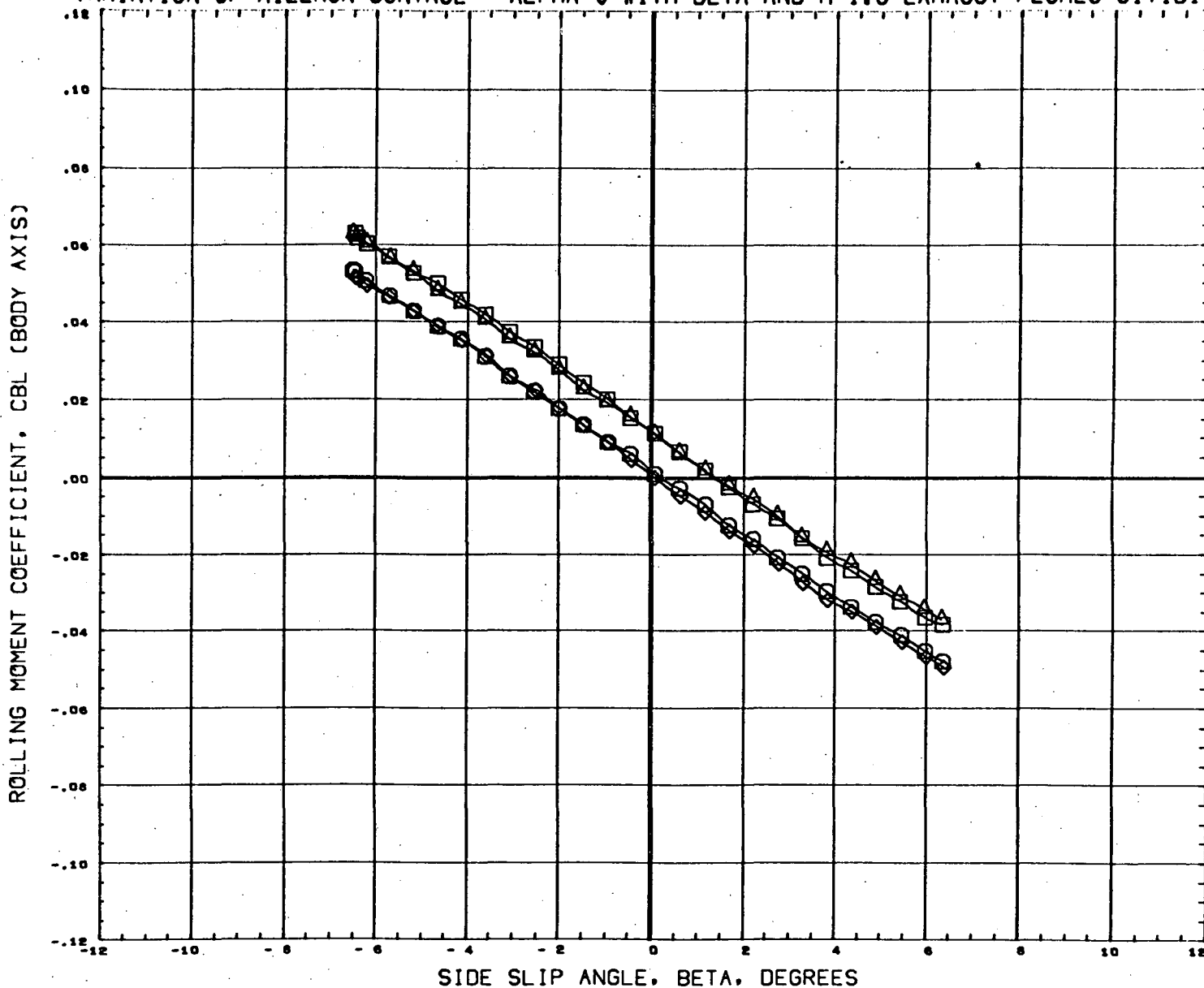


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7531)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004	IN.
(RD7541)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	957.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T1B1



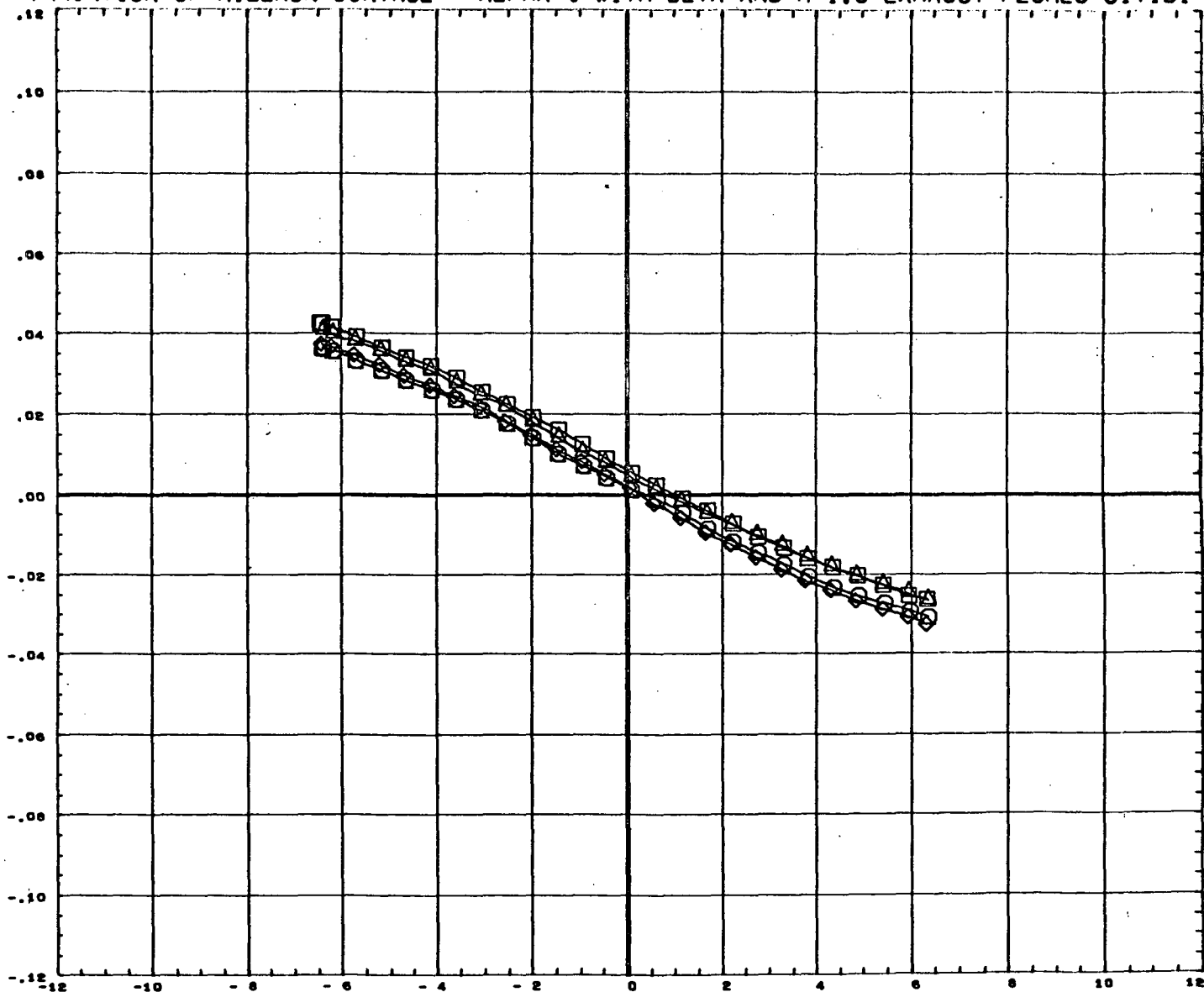
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7531)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.3004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7541)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T1B1

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

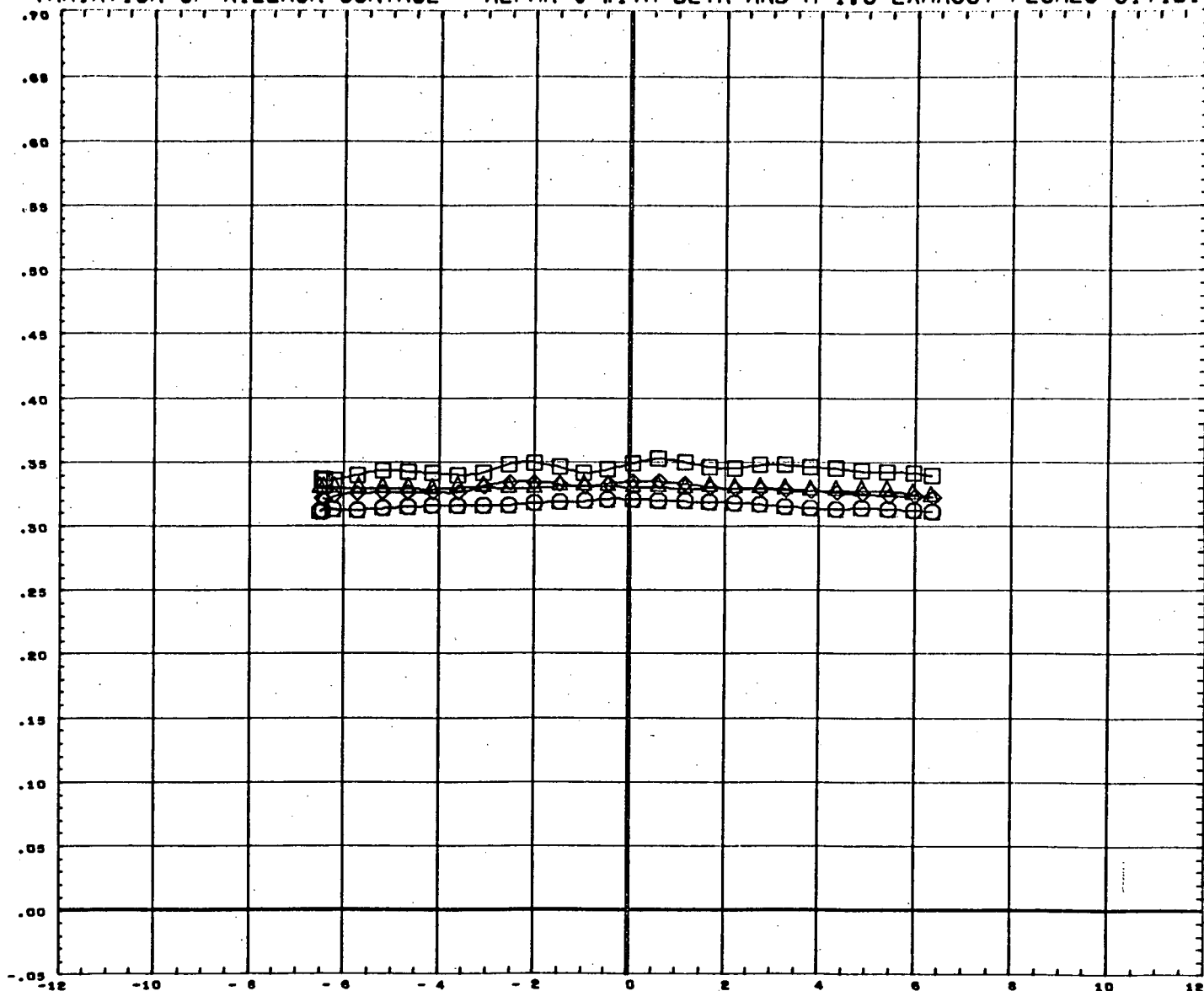
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7329)	MDAC S-222 COMPOSITE (T-C6) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(RD7531)	MDAC S-222 COMPOSITE (T-C6) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.3004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-C6) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	862.0004 IN.
(RD7541)	MDAC S-222 COMPOSITE (T-C6) 01T1B1+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T1B1

FOREBODY AXIAL FORCE COEFFICIENT, CAF



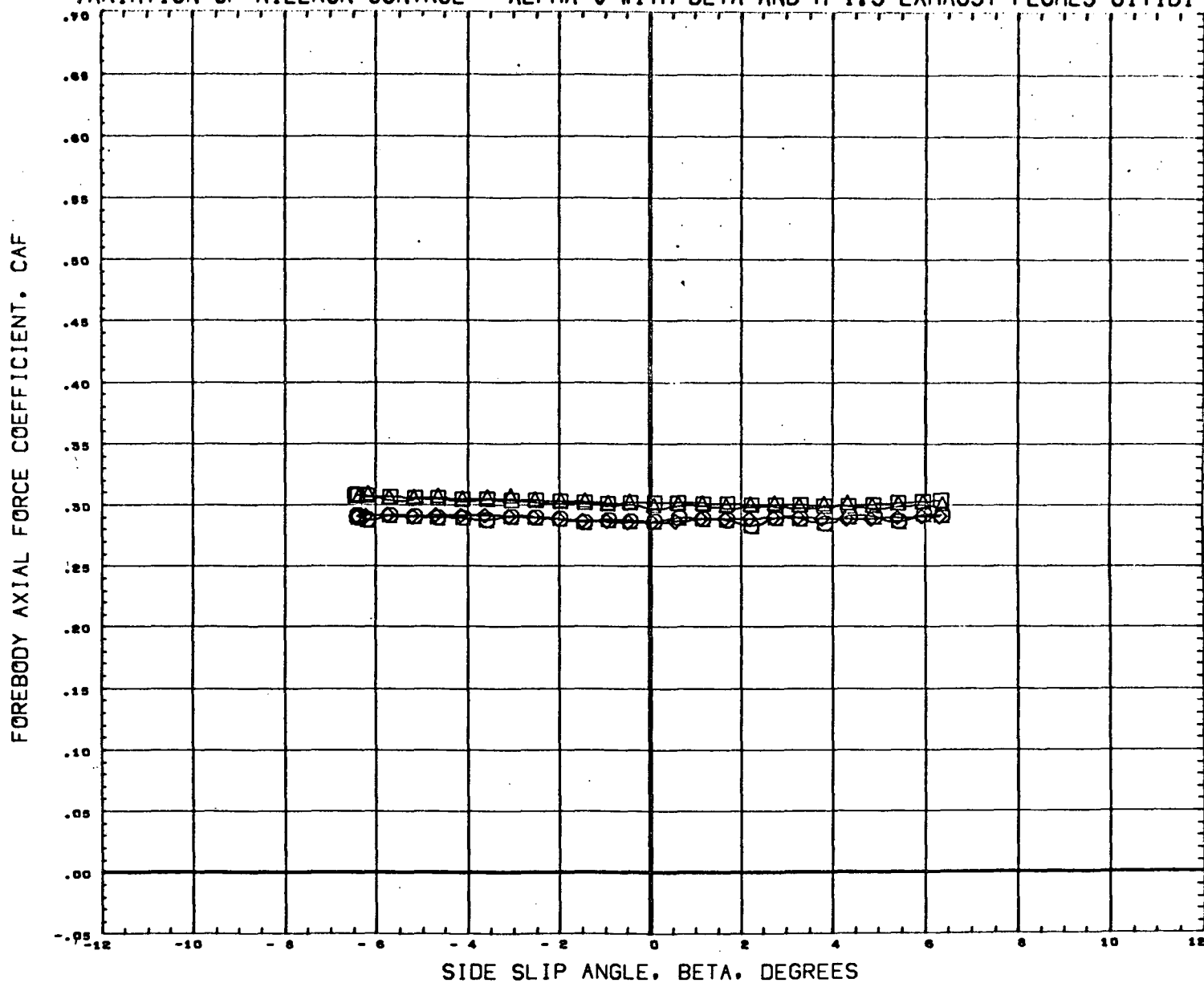
SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7531)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7533)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7541)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T1B1



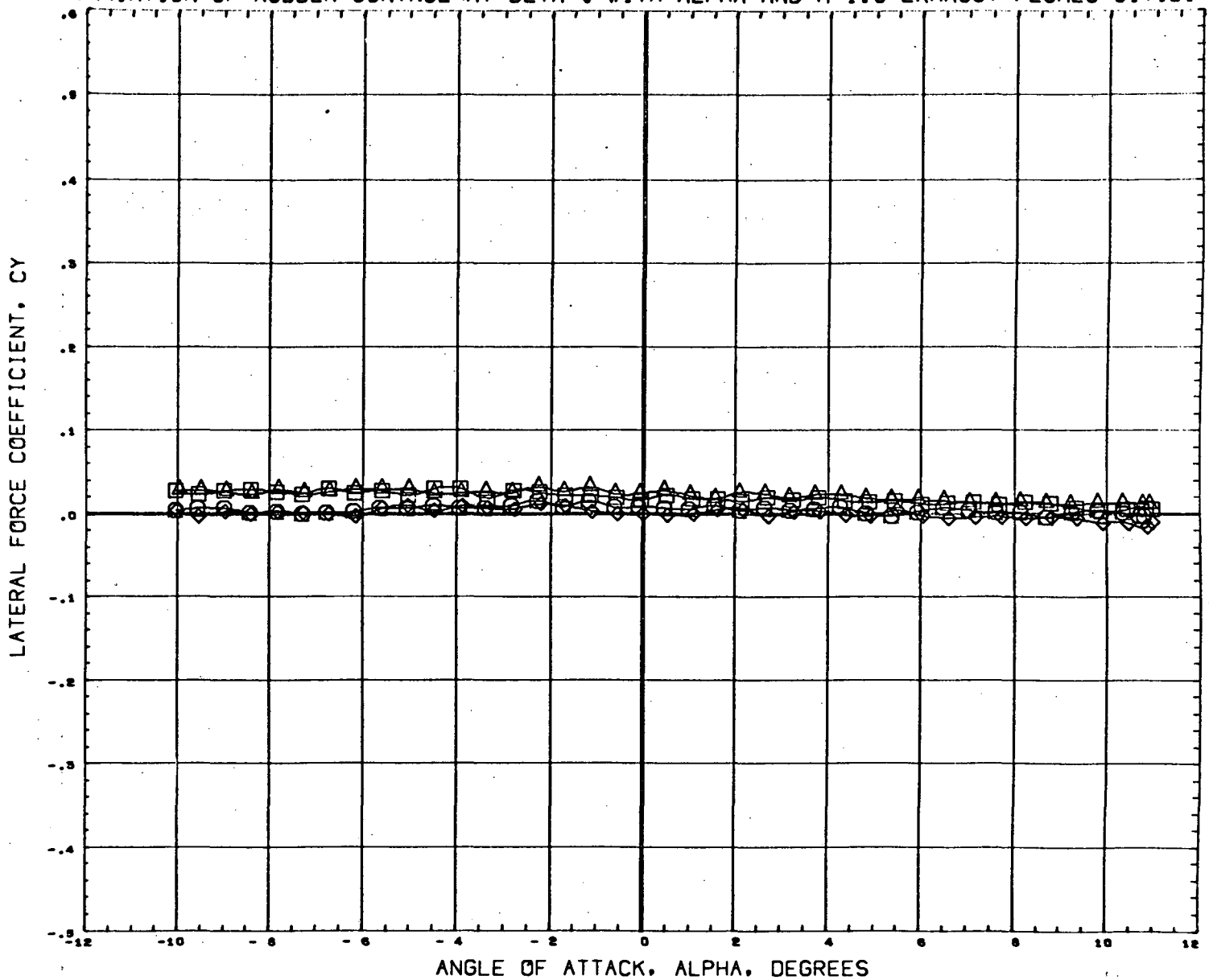
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7531)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7541)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T1B1

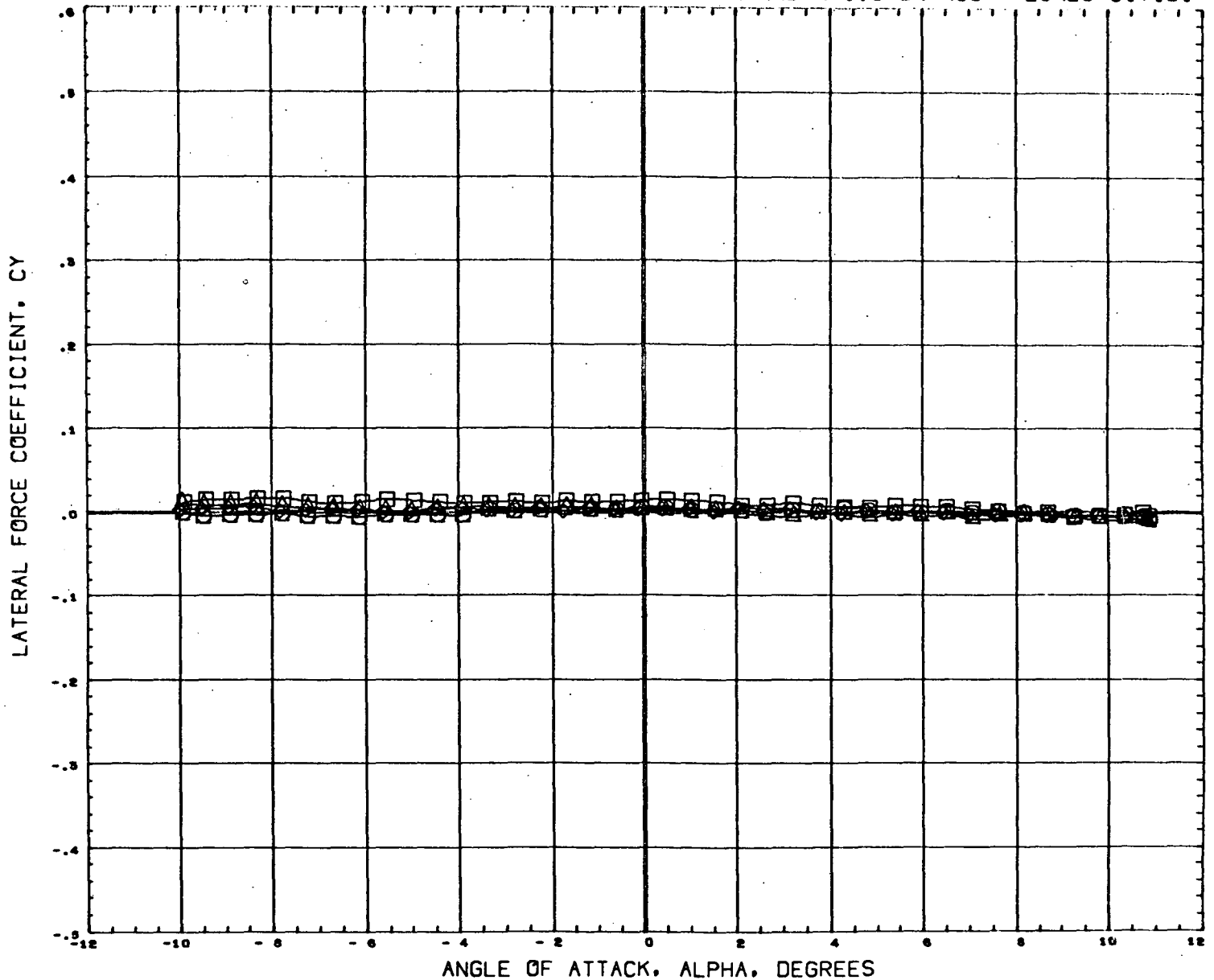


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7528)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(RD7536)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	SREF	882.0004 IN.
(RD7542)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T1B1

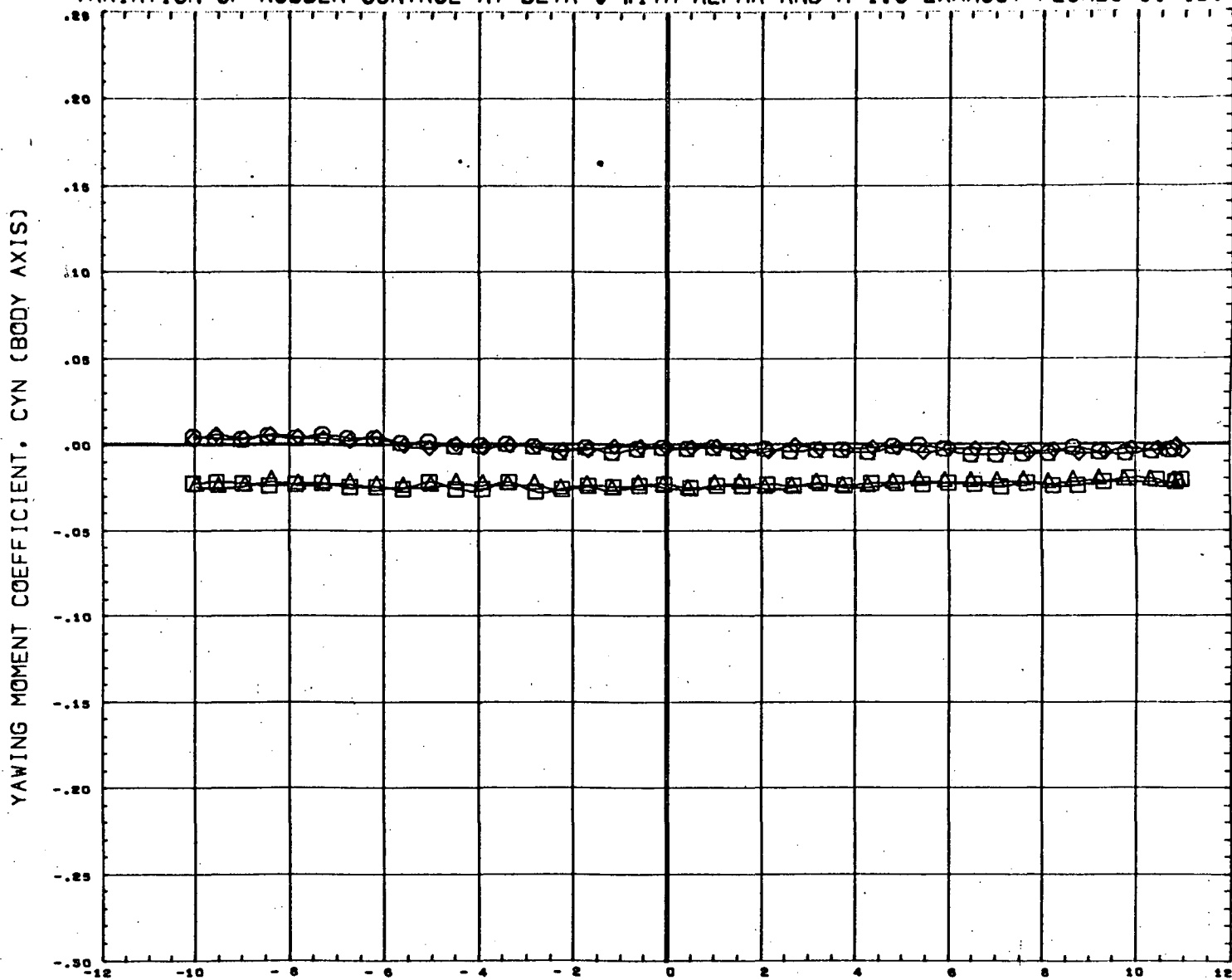


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7528)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7536)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7542)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T1B1

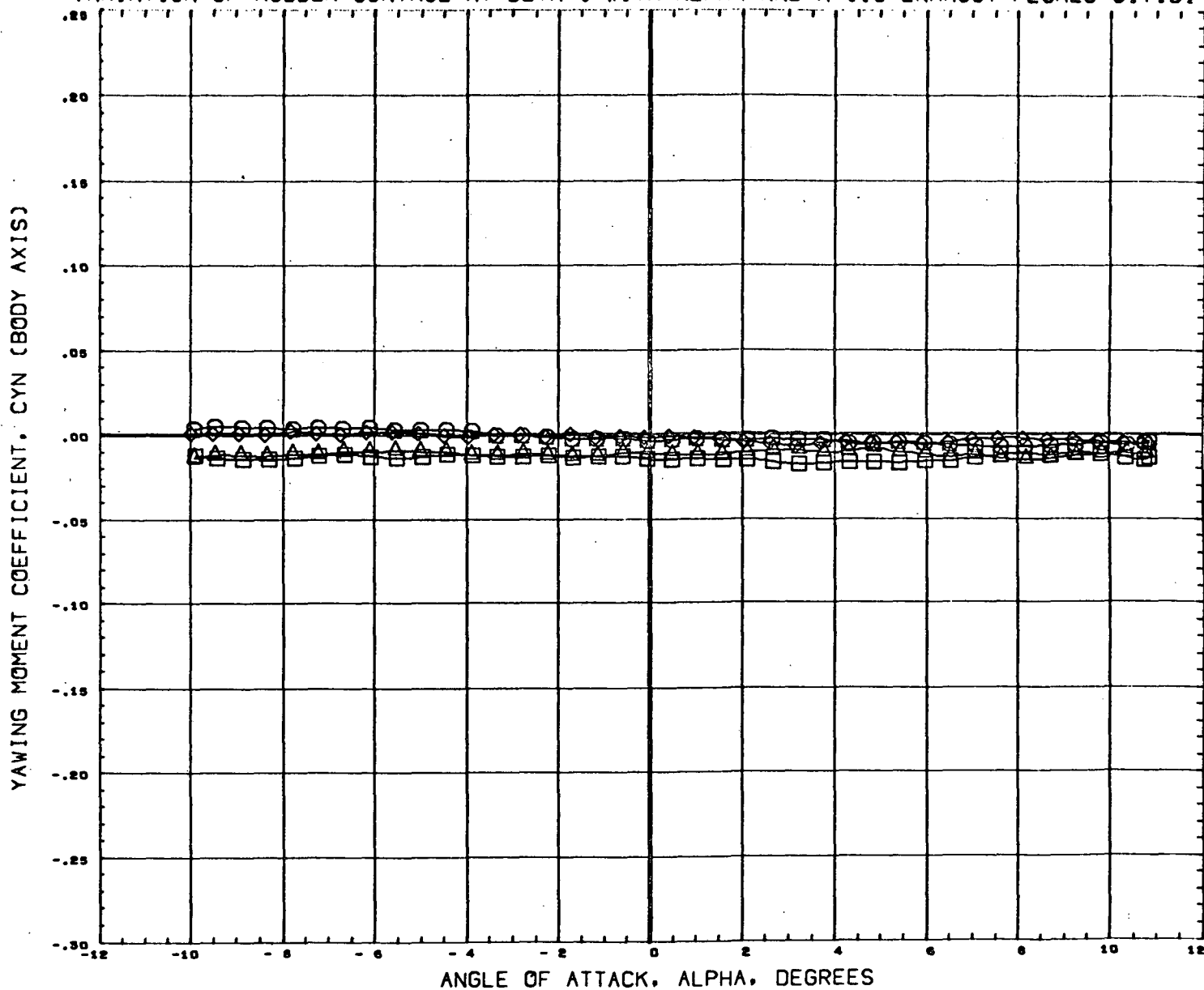


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7528)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(RD7536)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	862.0004 IN.
(RD7542)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.9000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T1B1

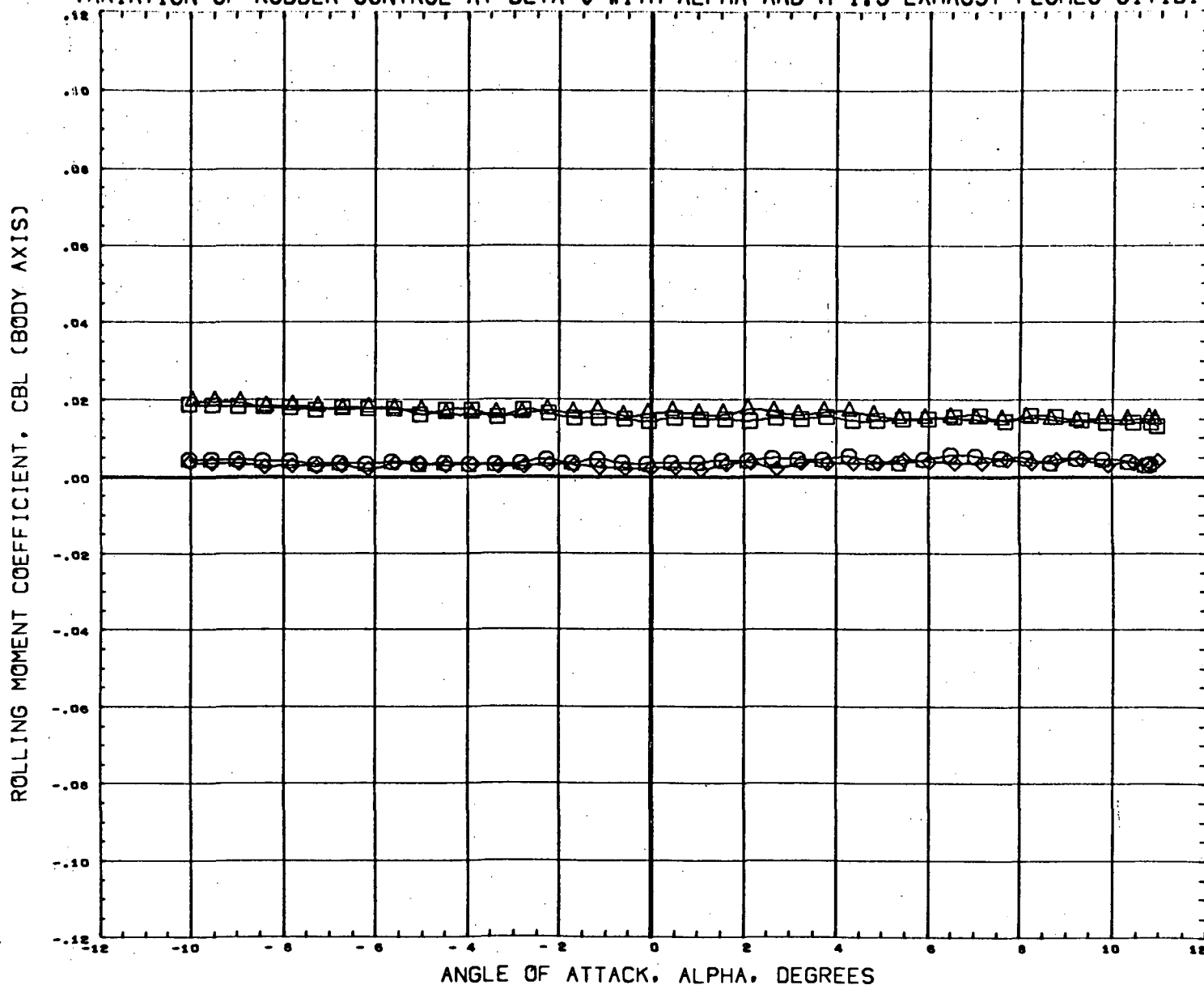


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7526)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7536)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7536)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	682.0004 IN.
(RD7542)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T1B1

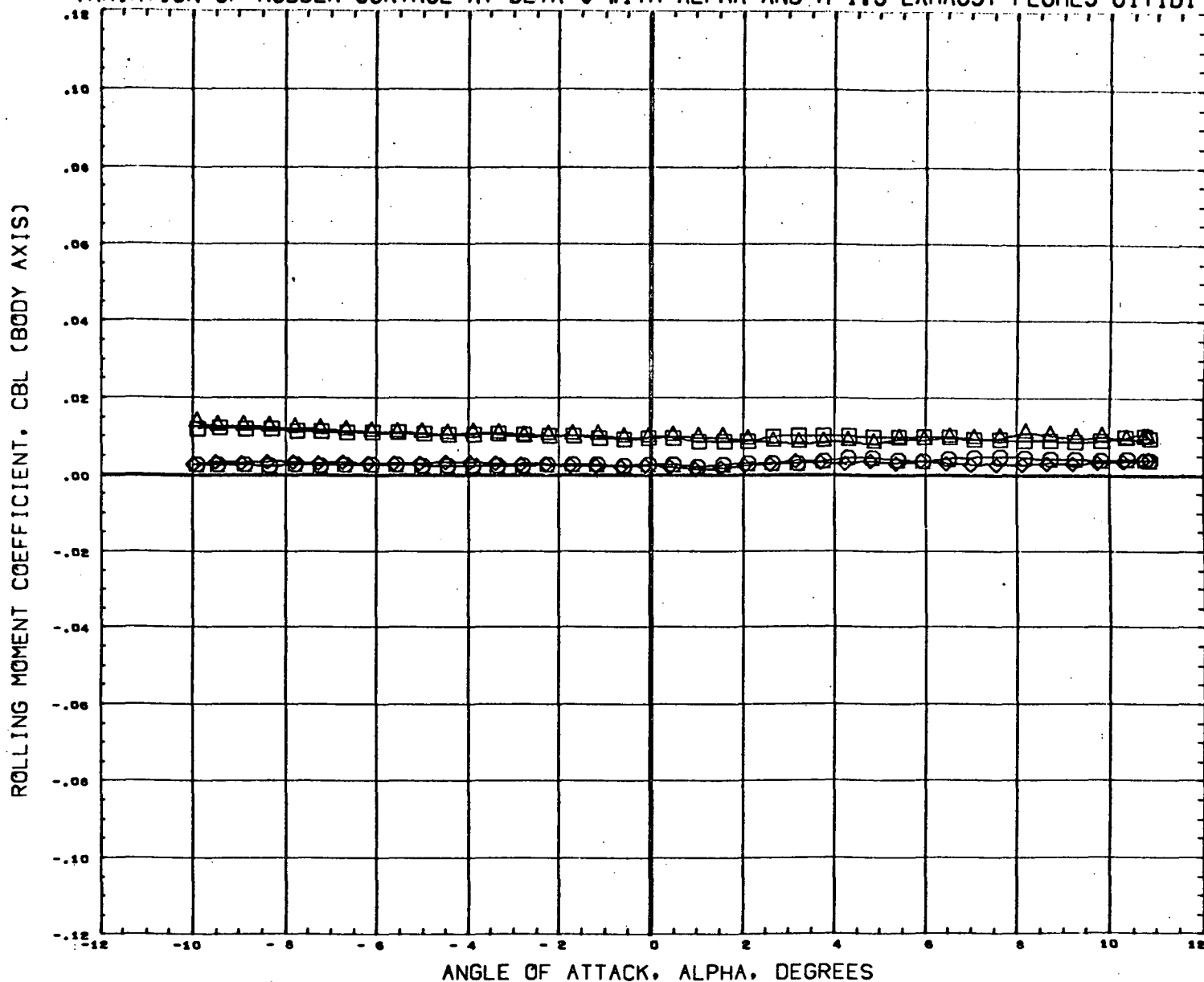


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7528)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7536)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7538)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	862.0004 IN.
(RD7542)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T1B1

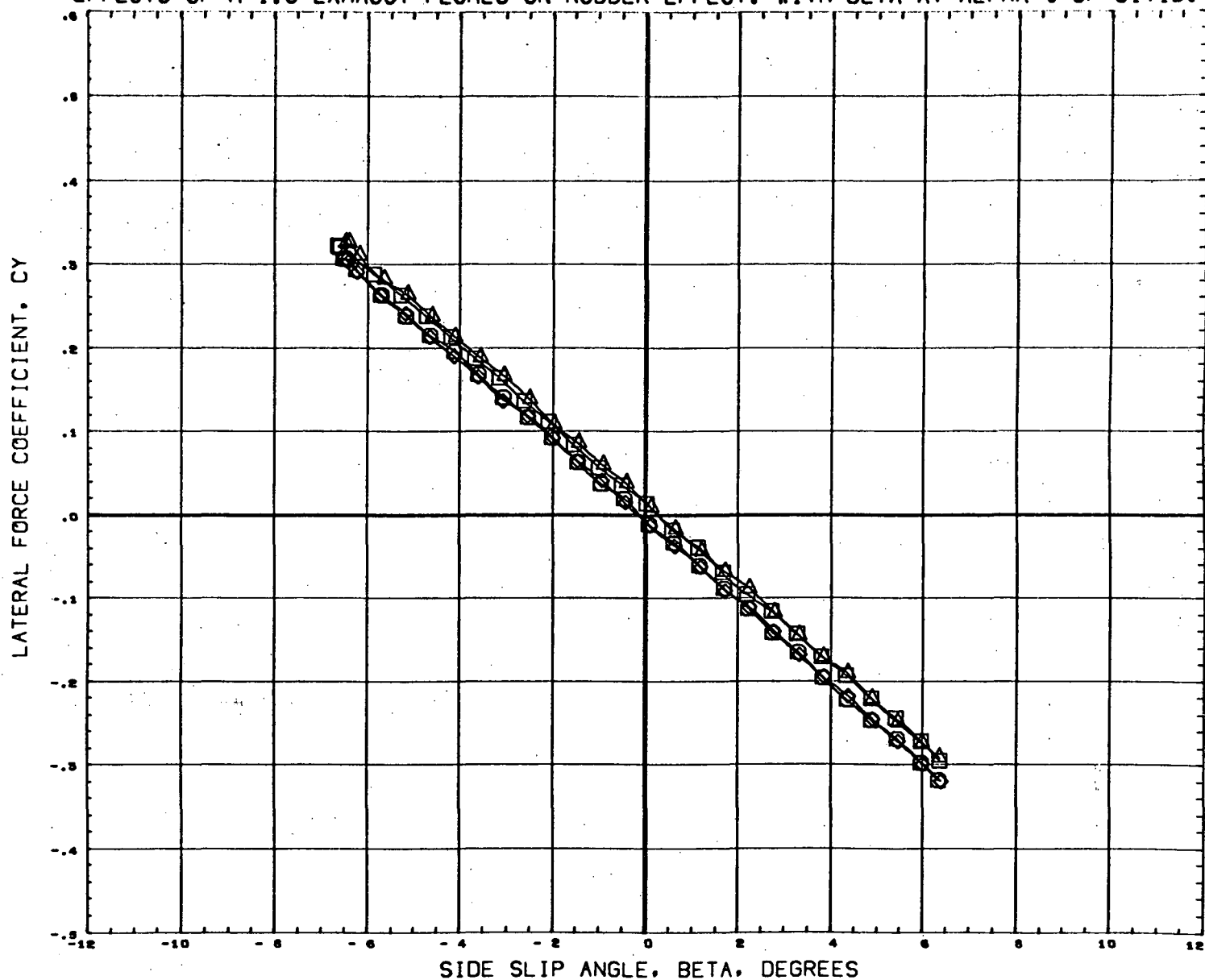


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7528)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7536)	MDAC S-222 COMPOSITE(T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(RD7538)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	882.0004	IN.
(RD7542)	MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T1B1

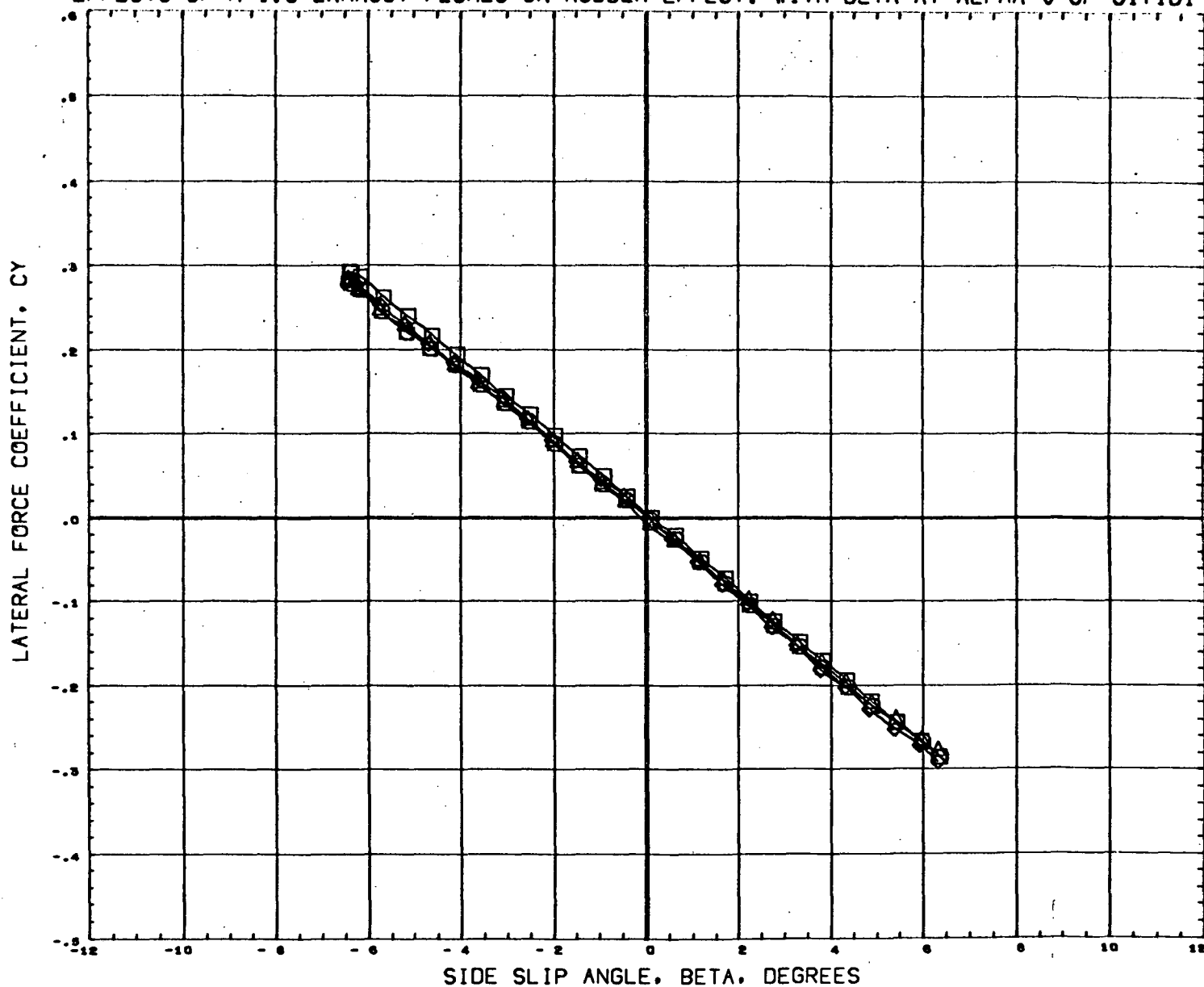


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7537)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	682.0004 IN.
(RD7543)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T1B1



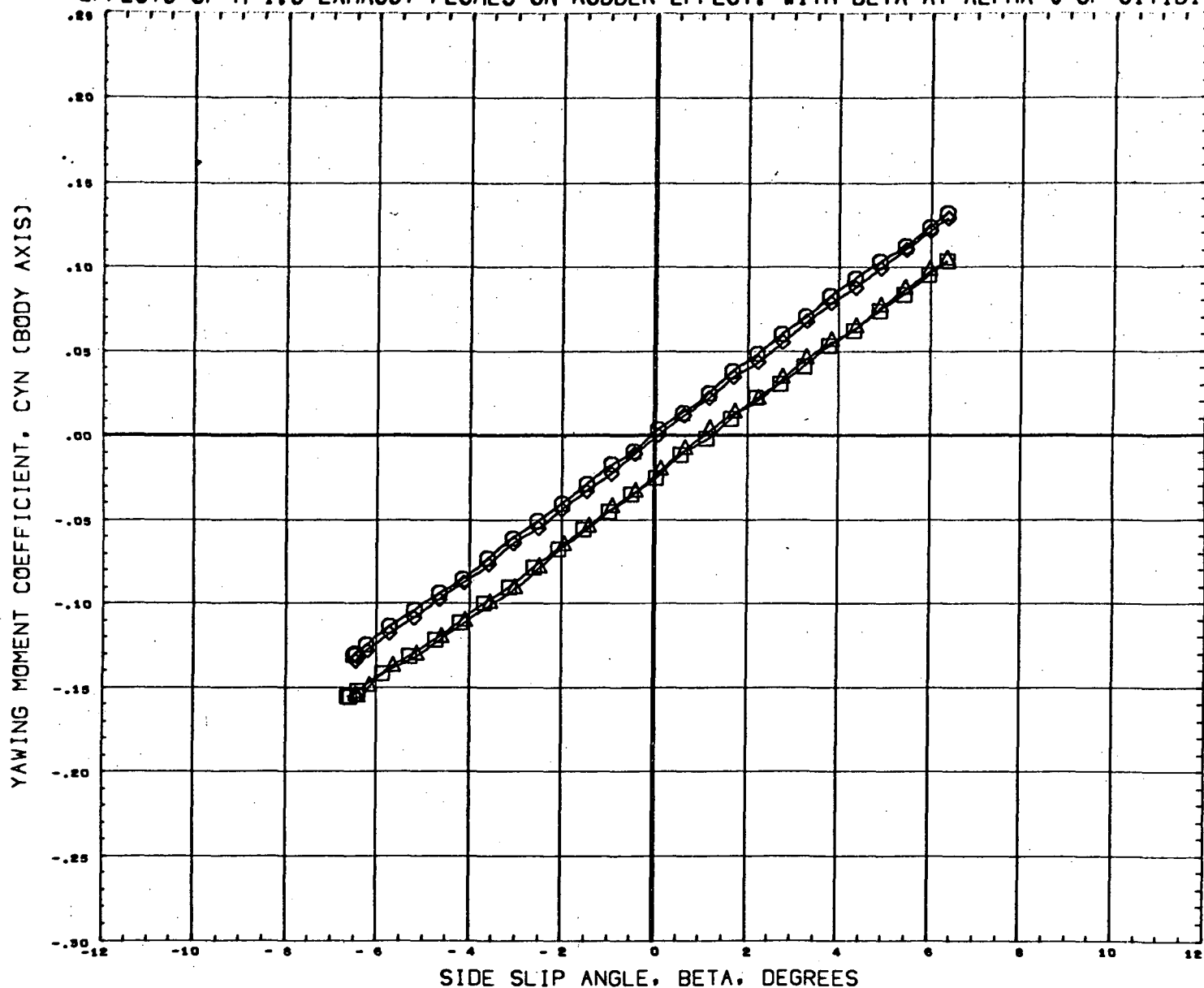
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7537)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.9004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	SREF	862.0004 IN.
(RD7543)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T1B1

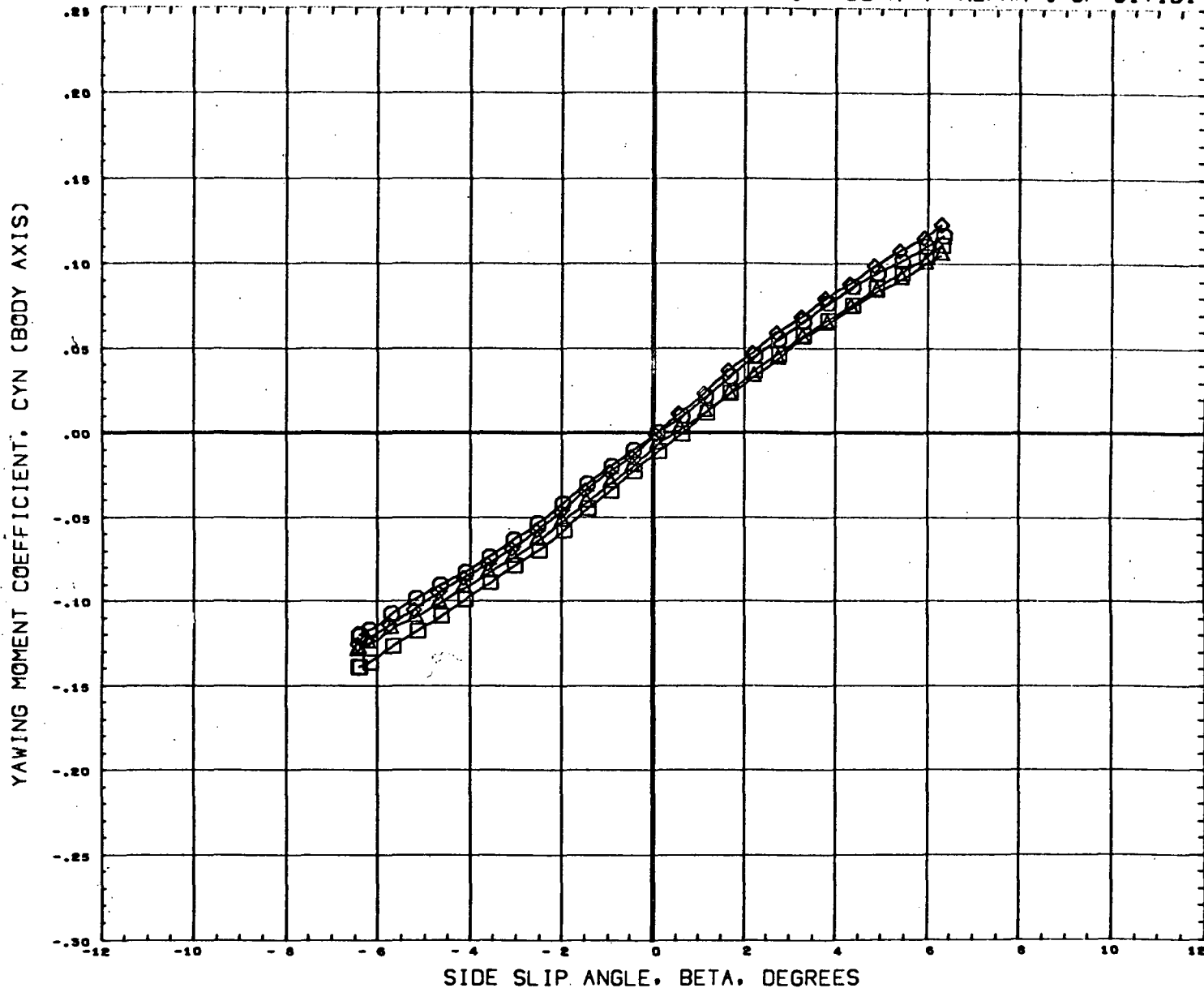


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(RD7537)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7543)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T1B1

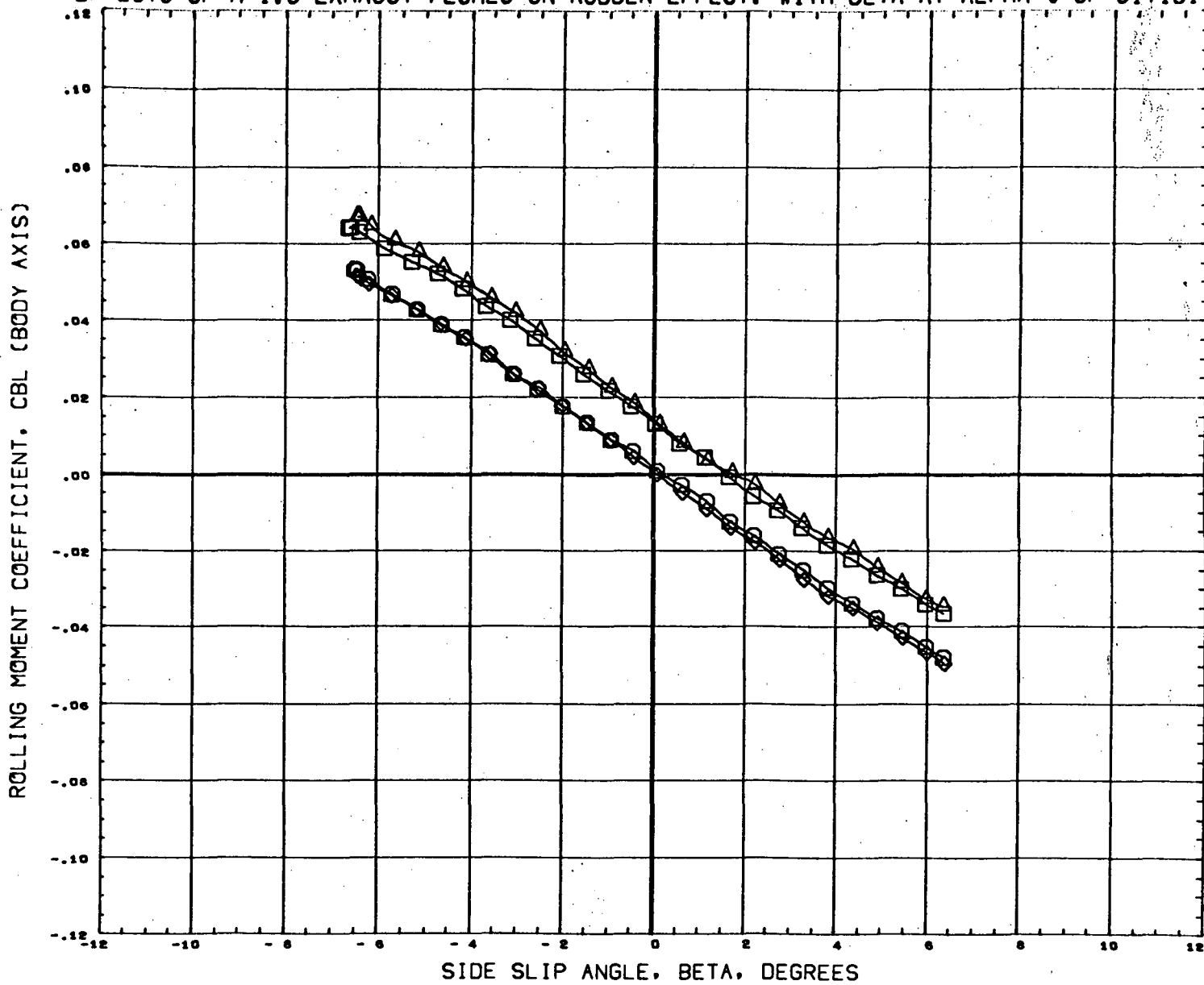


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7537)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	662.0004 IN.
(RD7543)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T1B1

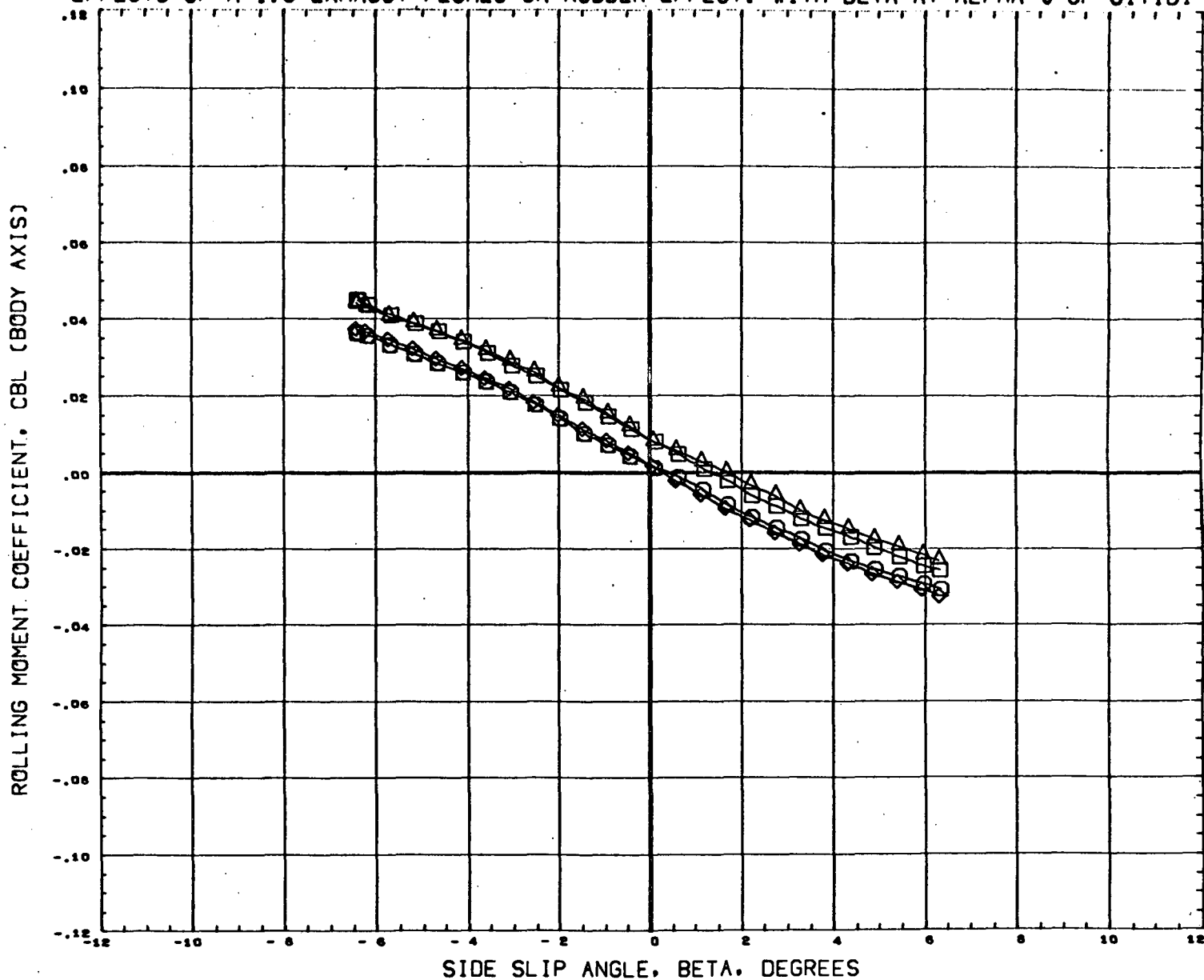


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7537)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	682.0004 IN.
(RD7543)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME(1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T1B1



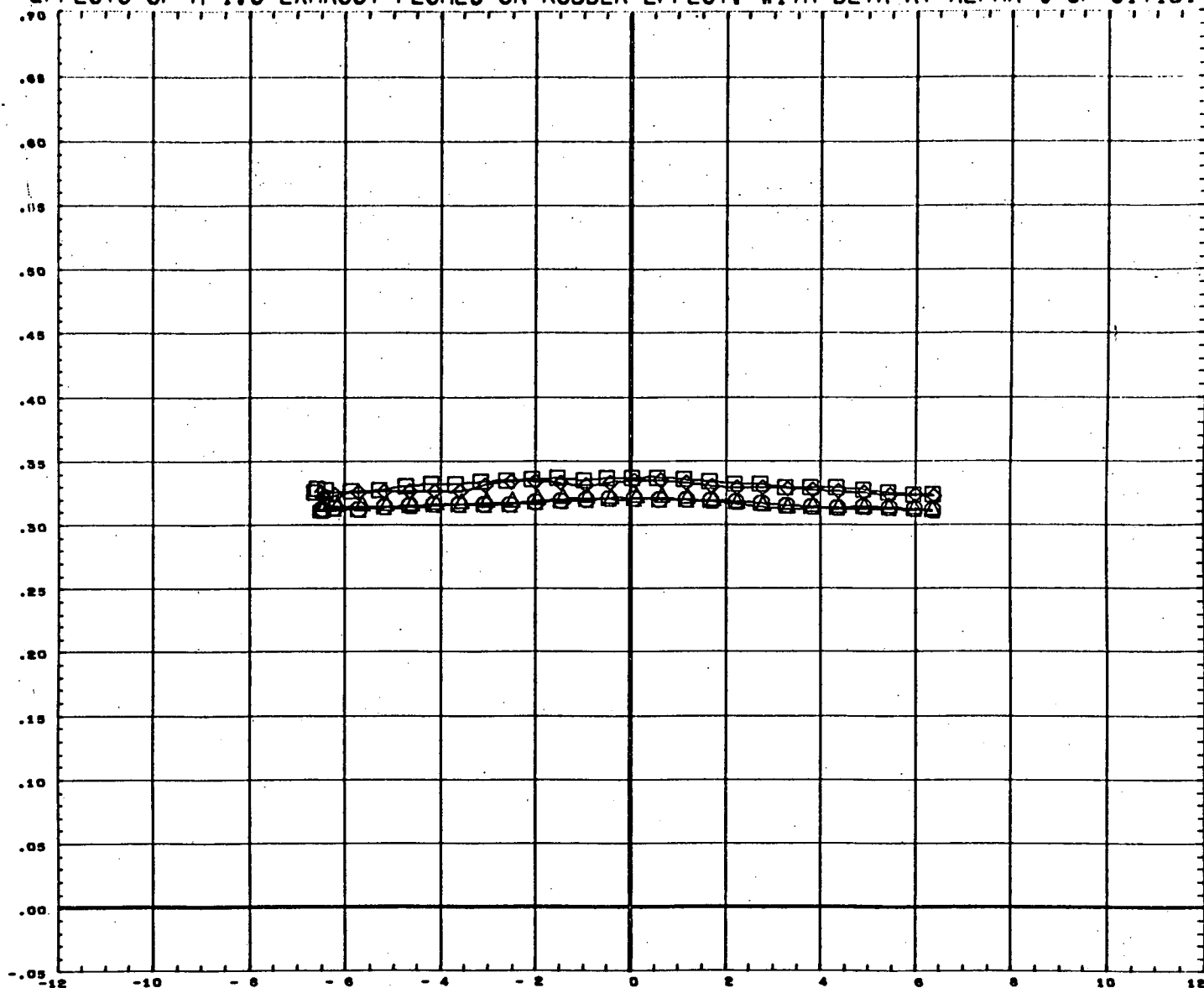
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7529)	MDAC S-222 COMPOSITE(T-CG) O1T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7537)	MDAC S-222 COMPOSITE(T-CG) O1T1B1	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(RD7539)	MDAC S-222 COMPOSITE(T-CG) O1T1B1+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	662.0004	IN.
(RD7543)	MDAC S-222 COMPOSITE(T-CG) O1T1B1+PLUME(1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T1B1

FOREBODY AXIAL FORCE COEFFICIENT, CAF



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7537)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	862.0004 IN.
(RD7543)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

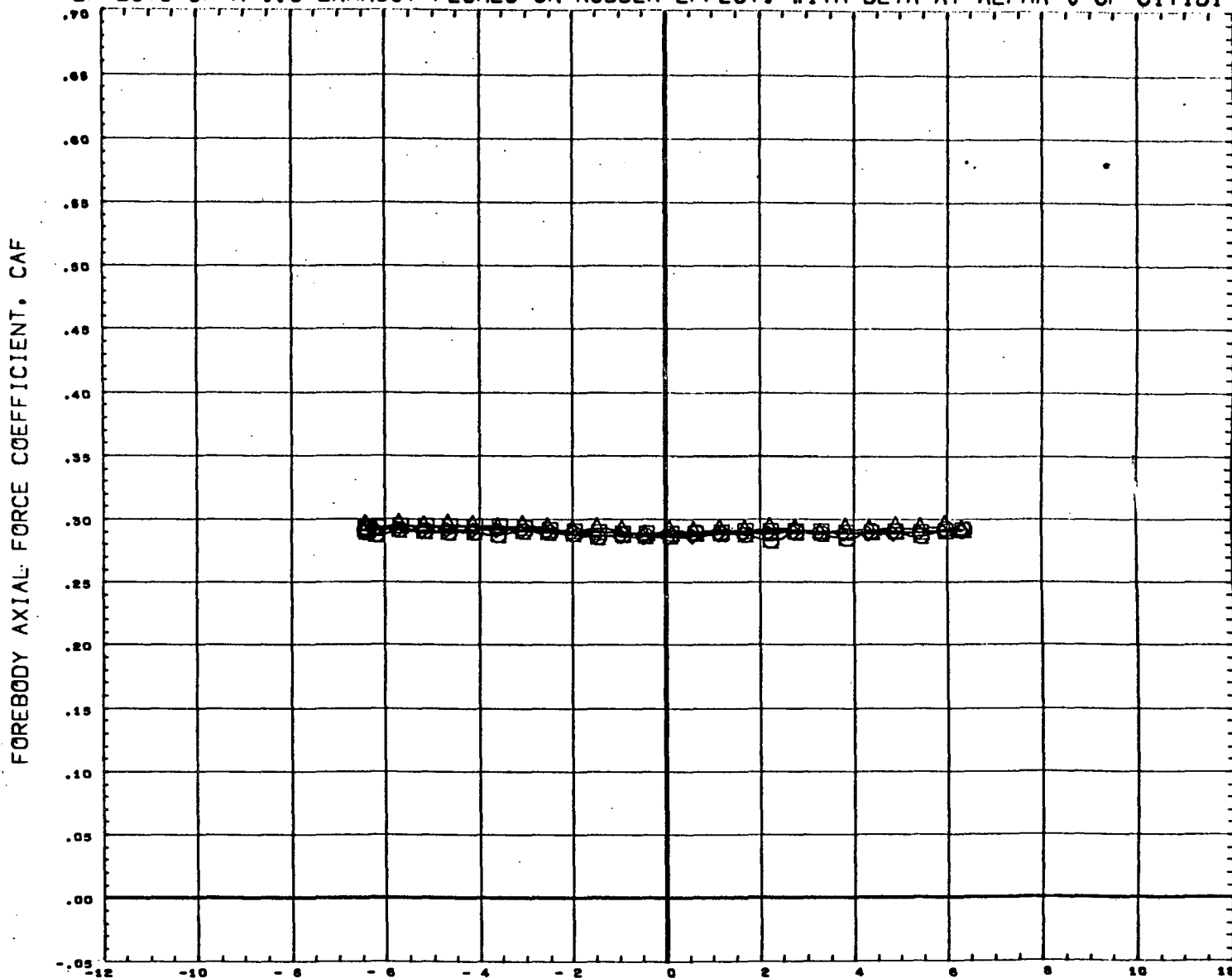
MACH

1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T1B1



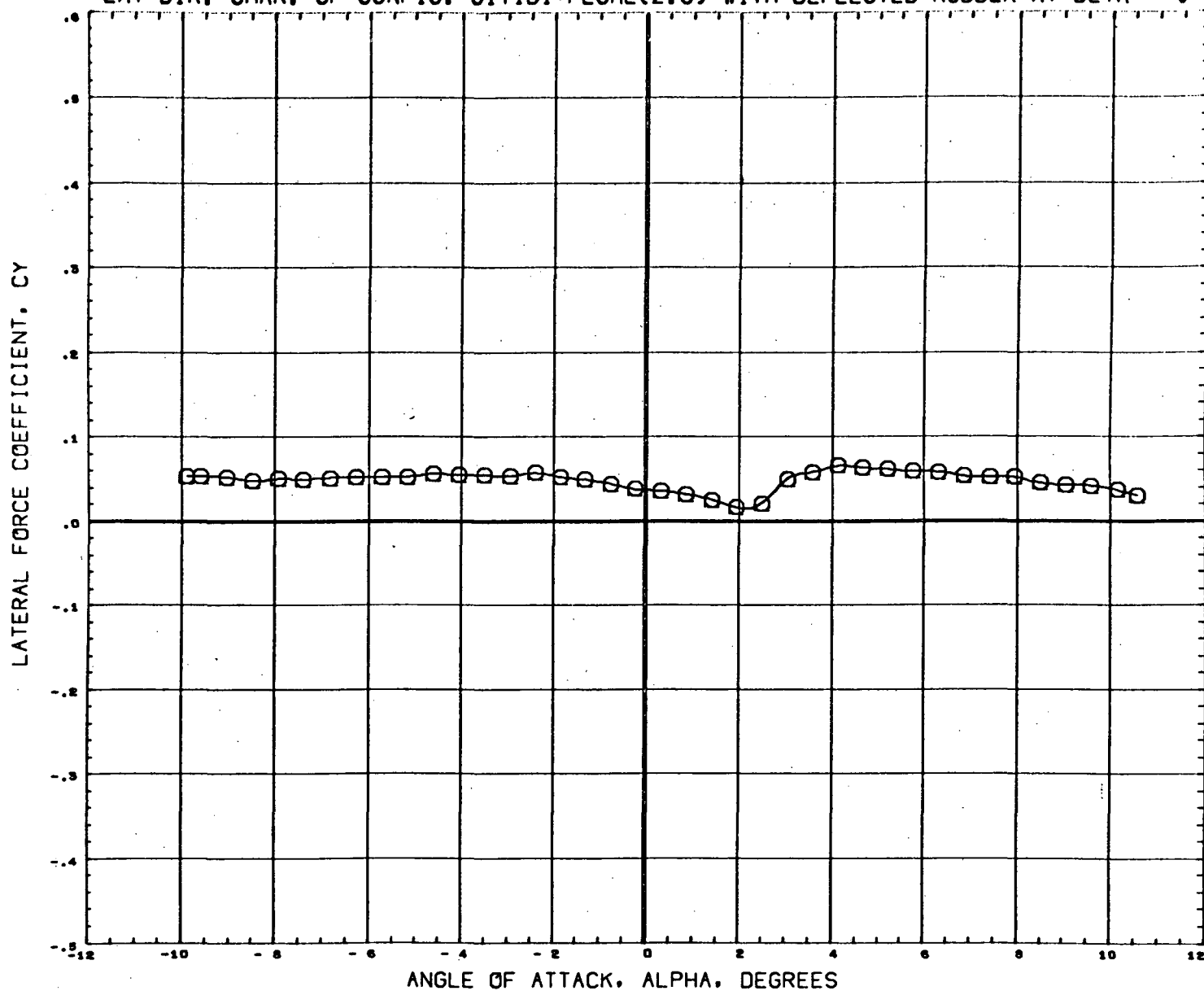
SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7529)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7537)	MDAC S-222 COMPOSITE (T-CG) 01T1B1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7539)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7543)	MDAC S-222 COMPOSITE (T-CG) 01T1B1+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LAT-DIR. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0



SYMBOL  $\square$  MACH 2.203 BETA 0.000 AILRON 0.000  
ELEVTR 0.000 RUDDER 10.000

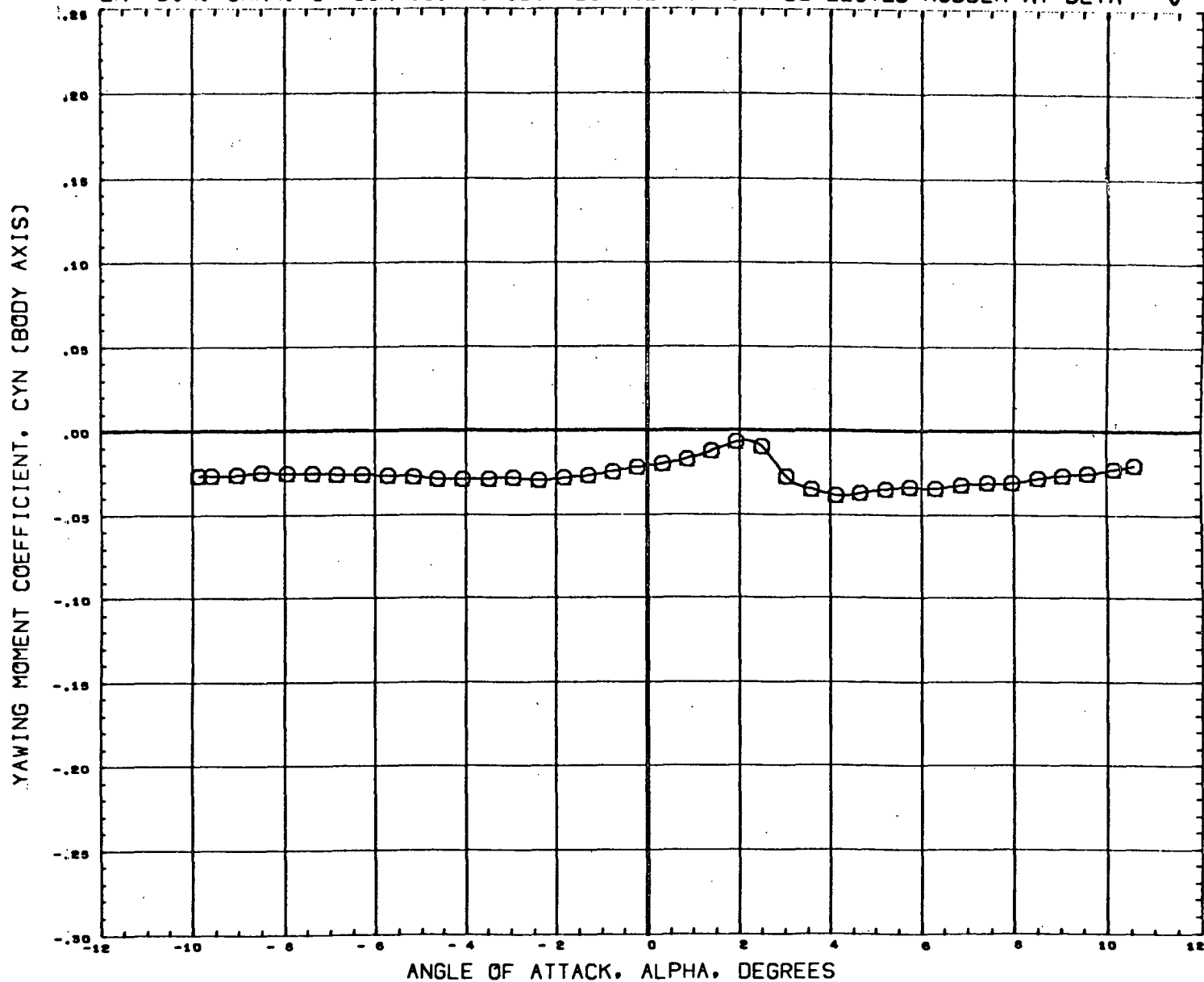
REFERENCE INFORMATION  
SREF 3155.3040 SQ.FT.  
LREF 609.5004 IN.  
BREF 882.0004 IN.  
XMRP 557.0004 IN.  
YMRP 0.0000 IN.  
ZMRP 200.0004 IN.  
SCALE 0.0060

DATA HIST. CODE MV

MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)

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# LAT-DIR. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0



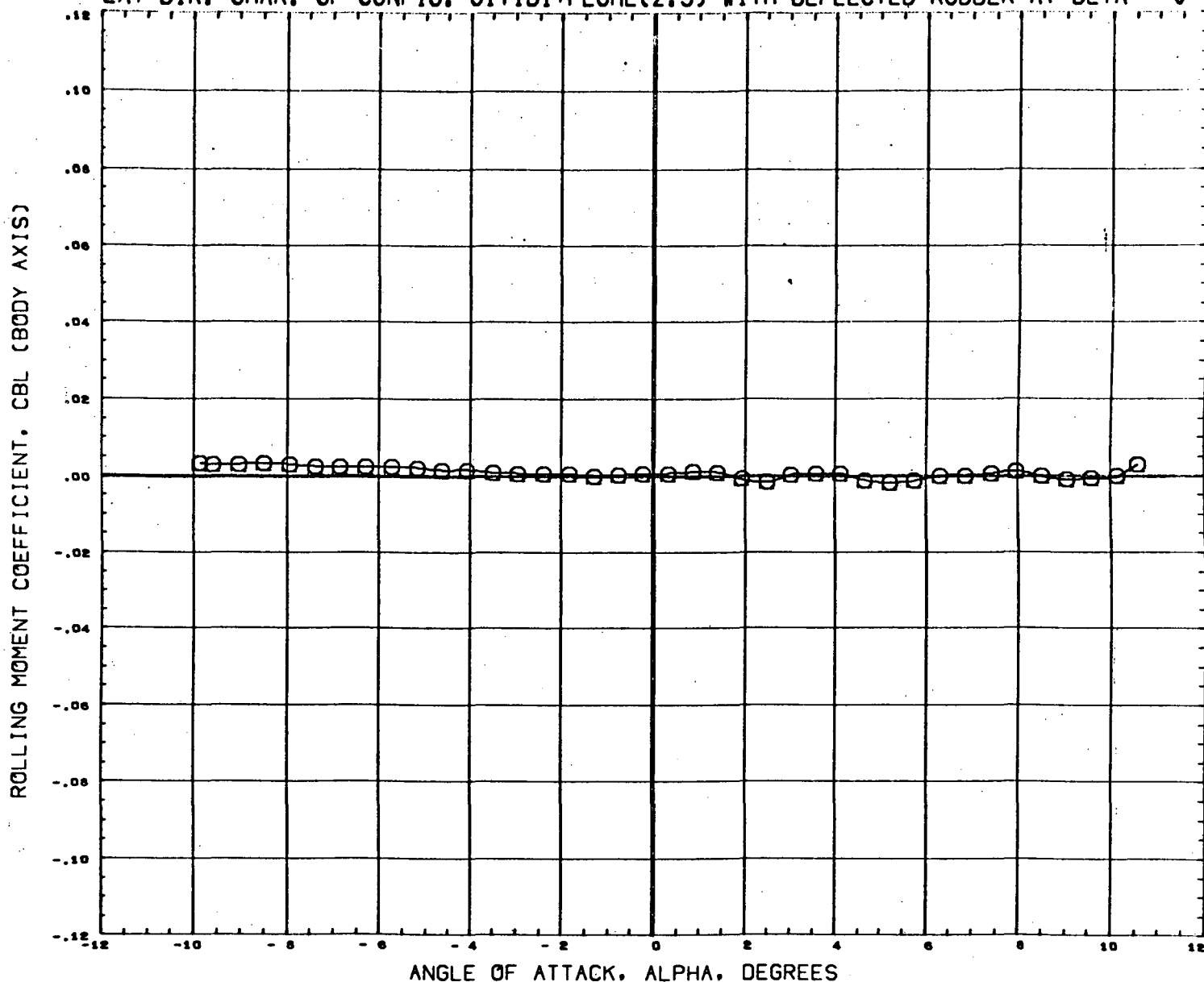
SYMBOL  $\bigcirc$  MACH 2.203 BETA 0.000 AILRON 0.000  
ELEVTR 0.000 RUDDER 10.000

REFERENCE INFORMATION  
SREF 3155.3040 SQ.FT.  
LREF 609.5004 IN.  
BREF 662.0004 IN.  
XMRP 557.0004 IN.  
YMRP 0.0000 IN.  
ZMRP 200.0004 IN.  
SCALE 0.0060

DATA HIST. CODE MV



# LAT-DIR. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0

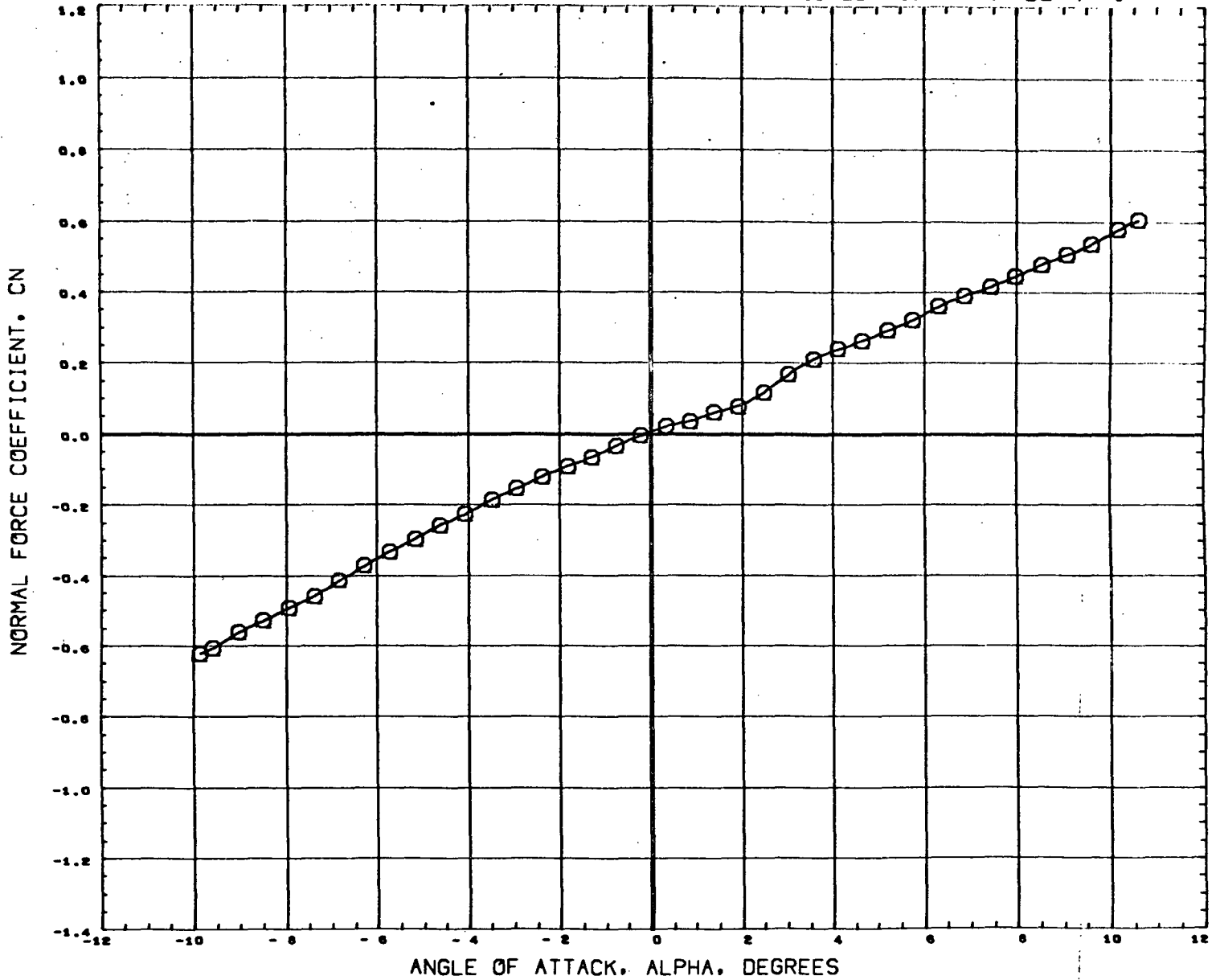


SYMBOL Q	MACH	PARAMETRIC VALUES			
	2.203	BETA	0.000	AILRON	0.000
		ELEVTR	0.000	RUDDER	10.000

REFERENCE INFORMATION		
SREF	3155.3040	SG.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	537.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE MV

LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0

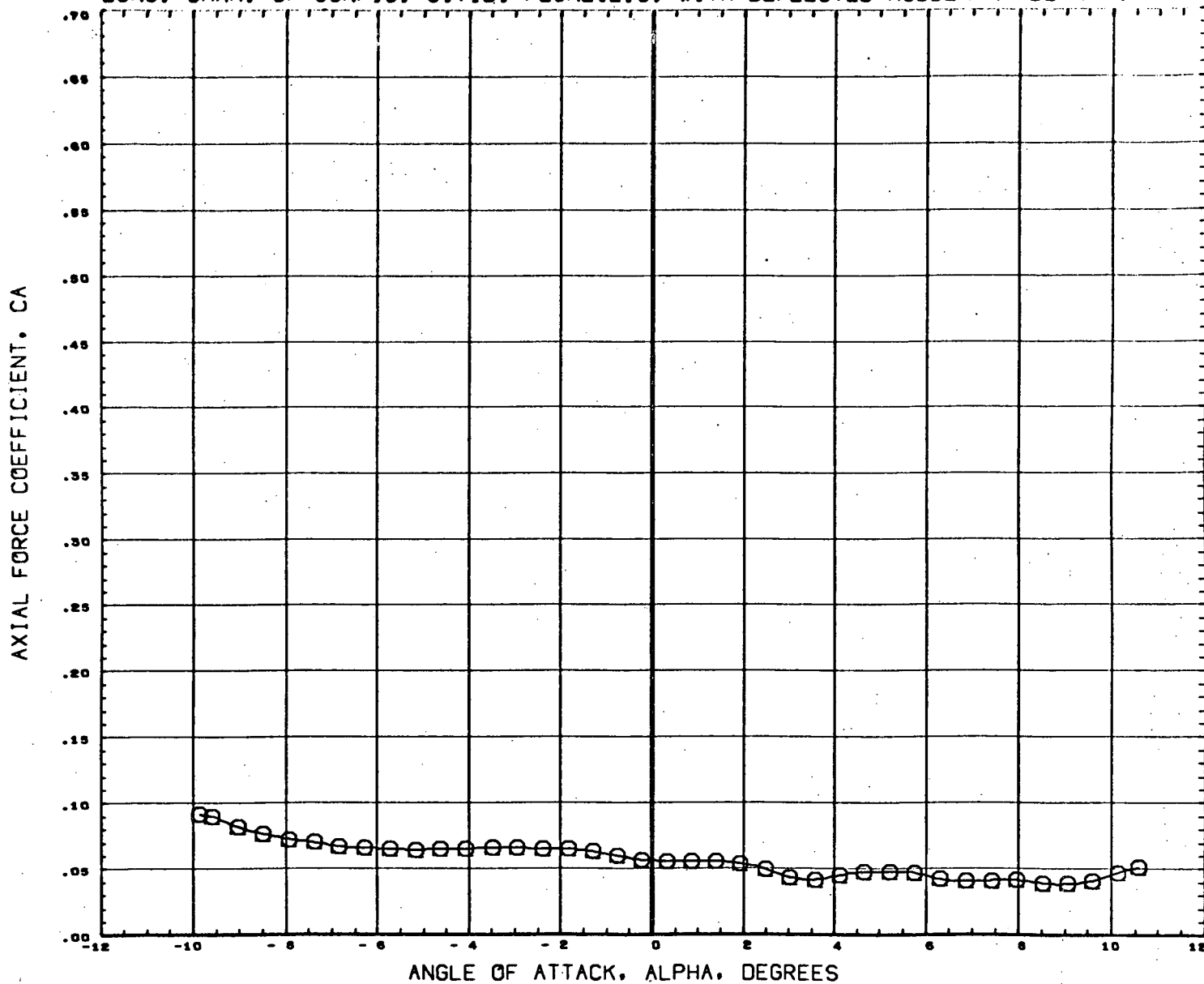


SYMBOL	MACH	PARAMETRIC VALUES			
○	2.203	BETA	0.000	AILRON	0.000
		ELEVTR	0.000	RUDDER	10.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE MVTV

LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0

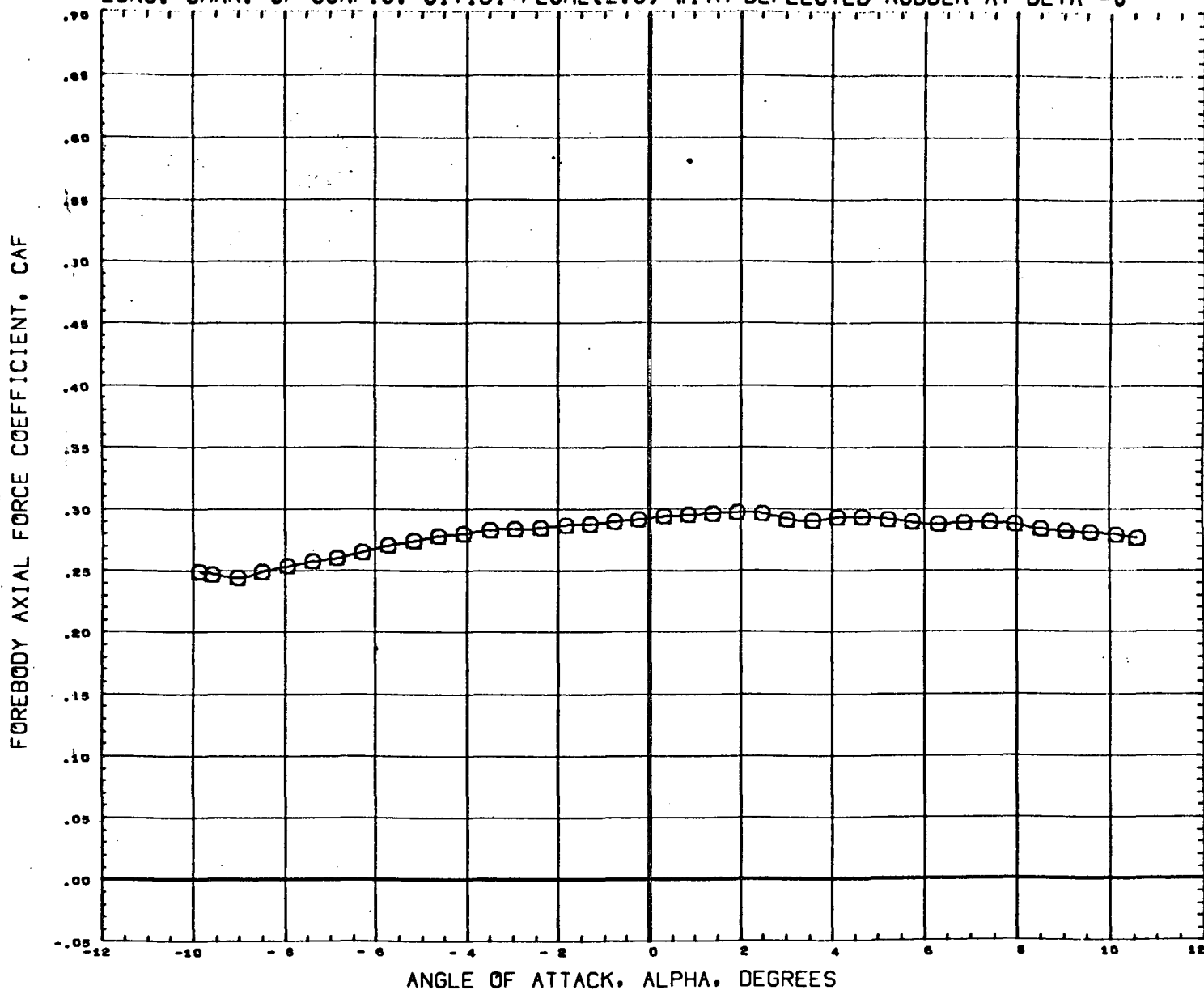


SYMBOL  $\square$  MACH 2.203 BETA 0.000 AILRON 0.000  
ELEVTR 0.000 RUDDER 10.000

REFERENCE INFORMATION  
SREF 3155.3040 SQ.FT.  
LREF 609.5004 IN.  
BREF 882.0004 IN.  
XMRP 557.0004 IN.  
YMRP 0.0000 IN.  
ZMRP 200.0004 IN.  
SCALE 0.0060

DATA HIST. CODE MVTV

# LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0

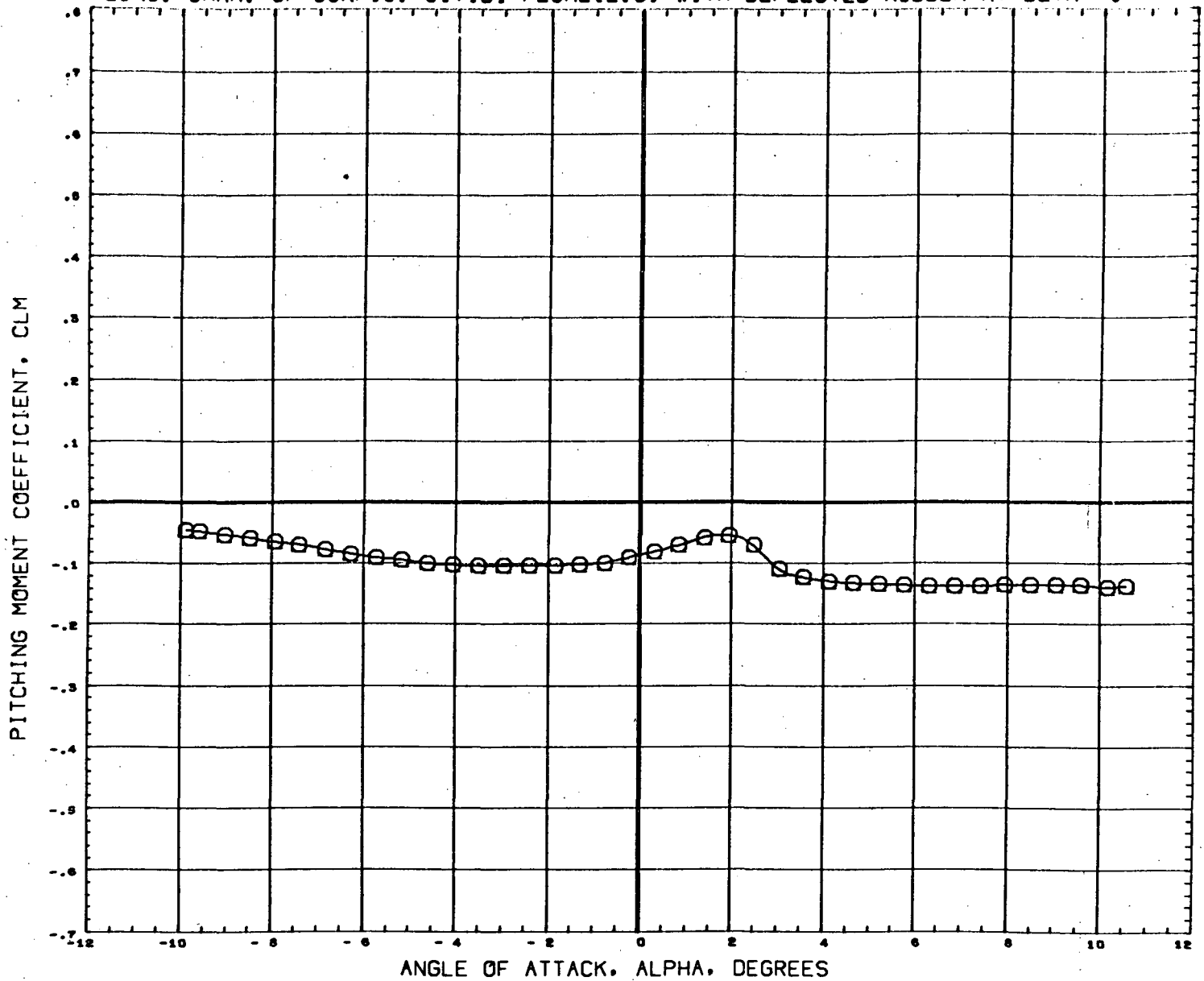


SYMBOL	MACH	PARAMETRIC VALUES			
○	2.203	BETA	0.000	AILRON	0.000
		ELEVTR	0.000	RUDDER	10.000

REFERENCE INFORMATION		
SREF	3159.3040	SG.FT.
LREF	609.3004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE MVTV

LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0

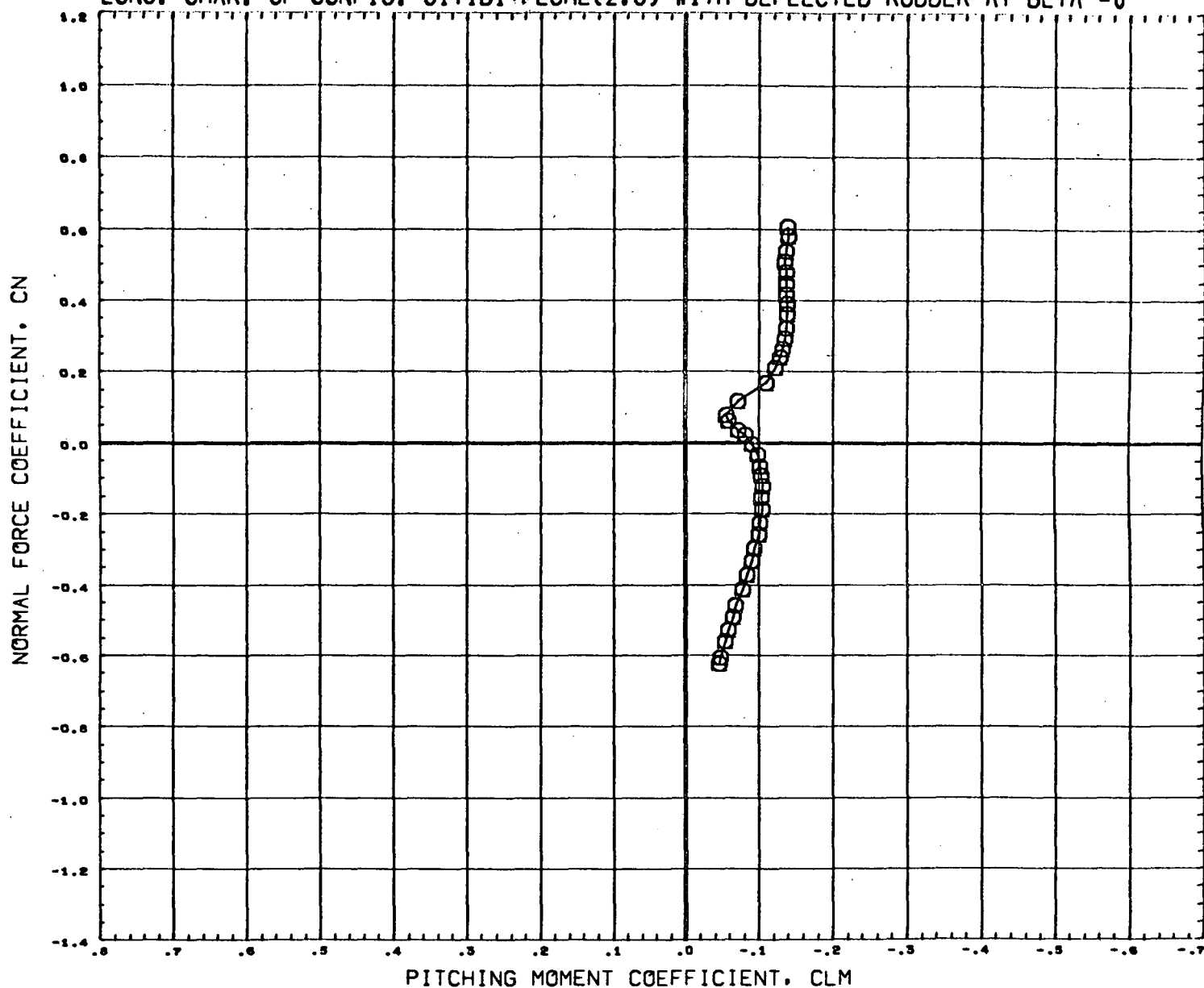


SYMBOL ○	MACH	PARAMETRIC VALUES			
	2.203	BETA	0.000	AILRON	0.000
		ELEVTR	0.000	RUDDER	10.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	662.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE MVTV

# LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA =0

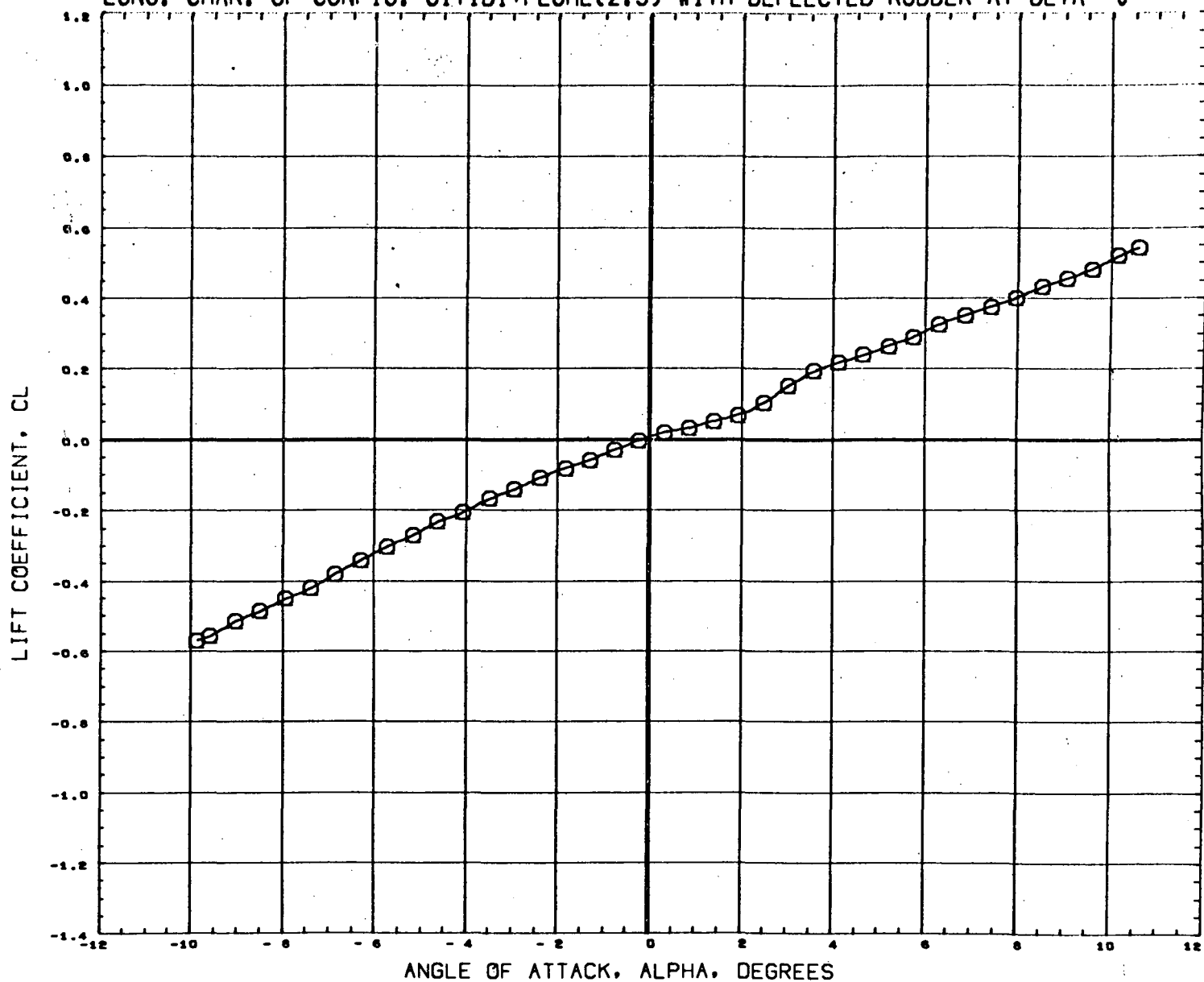


SYMBOL	MACH	PARAMETRIC VALUES			
○	2.203	BETA	0.000	AILRON	0.000
		ELEVTR	0.000	RUDDER	10.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE MVTV

# LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA =0

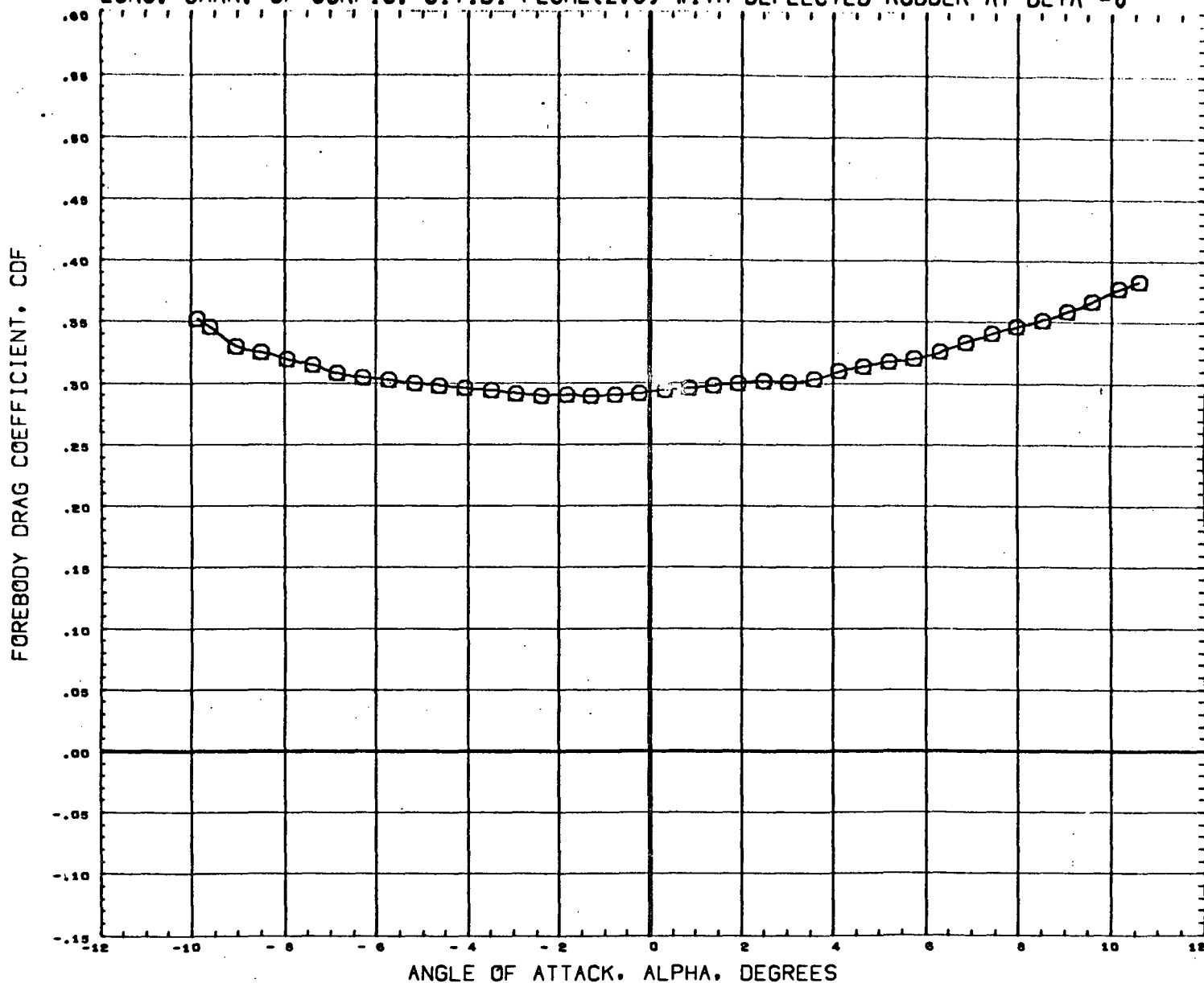


SYMBOL	MACH	PARAMETRIC VALUES			
○	2.203	BETA	0.000	AILRON	0.000
		ELEVTR	0.000	RUDDER	10.000

REFERENCE INFORMATION		
SREF	3155.3040	sq.ft.
LREF	609.5004	in.
BREF	882.0004	in.
XMRP	997.0004	in.
YMRP	0.0000	in.
ZMRP	200.0004	in.
SCALE	0.0060	

DATA HIST. CODE MVTV

LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA =0



SYMBOL	MACH	PARAMETRIC VALUES			
⊙	2.203	BETA	0.000	AILRON	0.000
		ELEVTR	0.000	RUDDER	10.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE MVTV

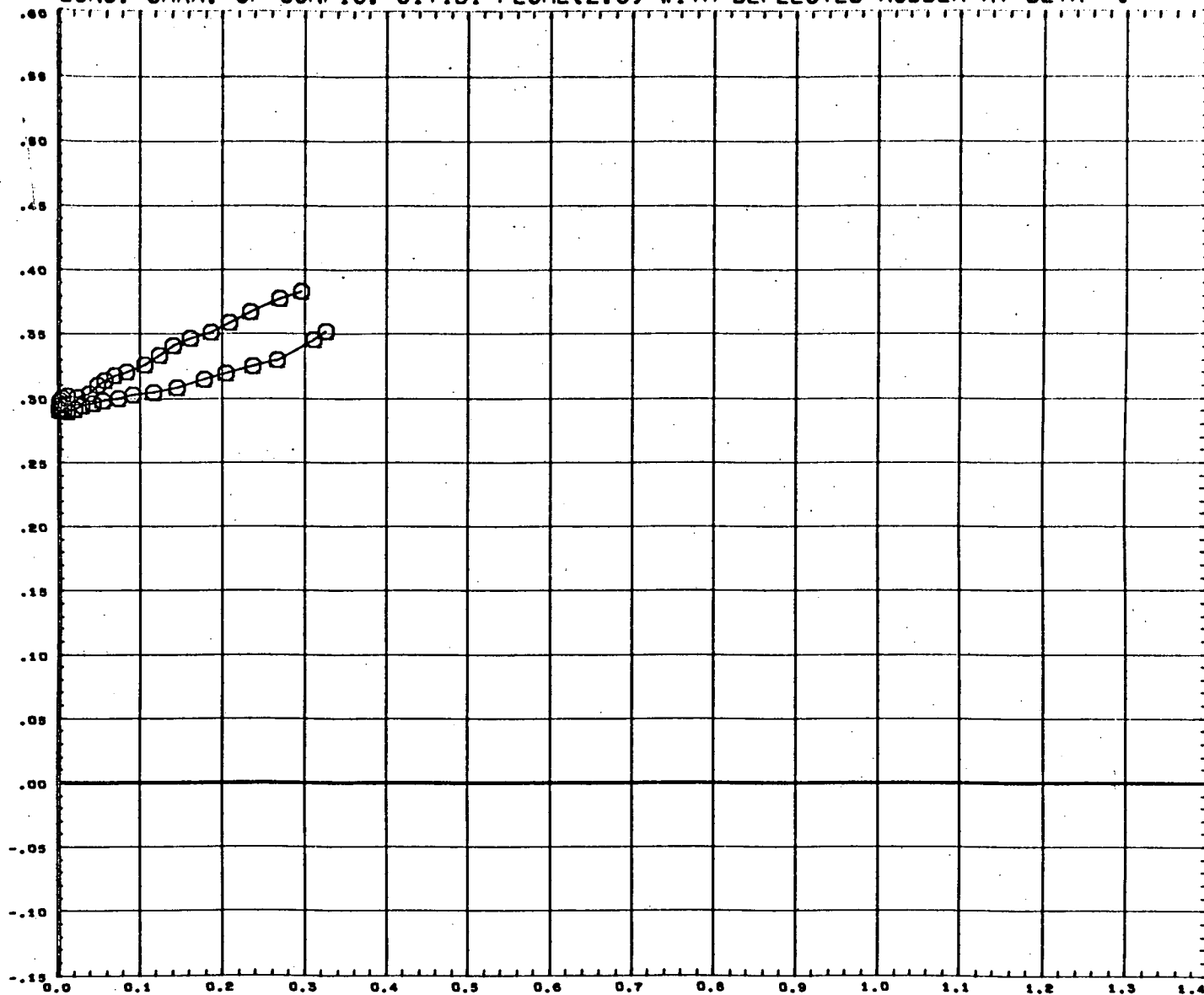
MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)

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LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA =0

FOREBODY DRAG COEFFICIENT, CDF

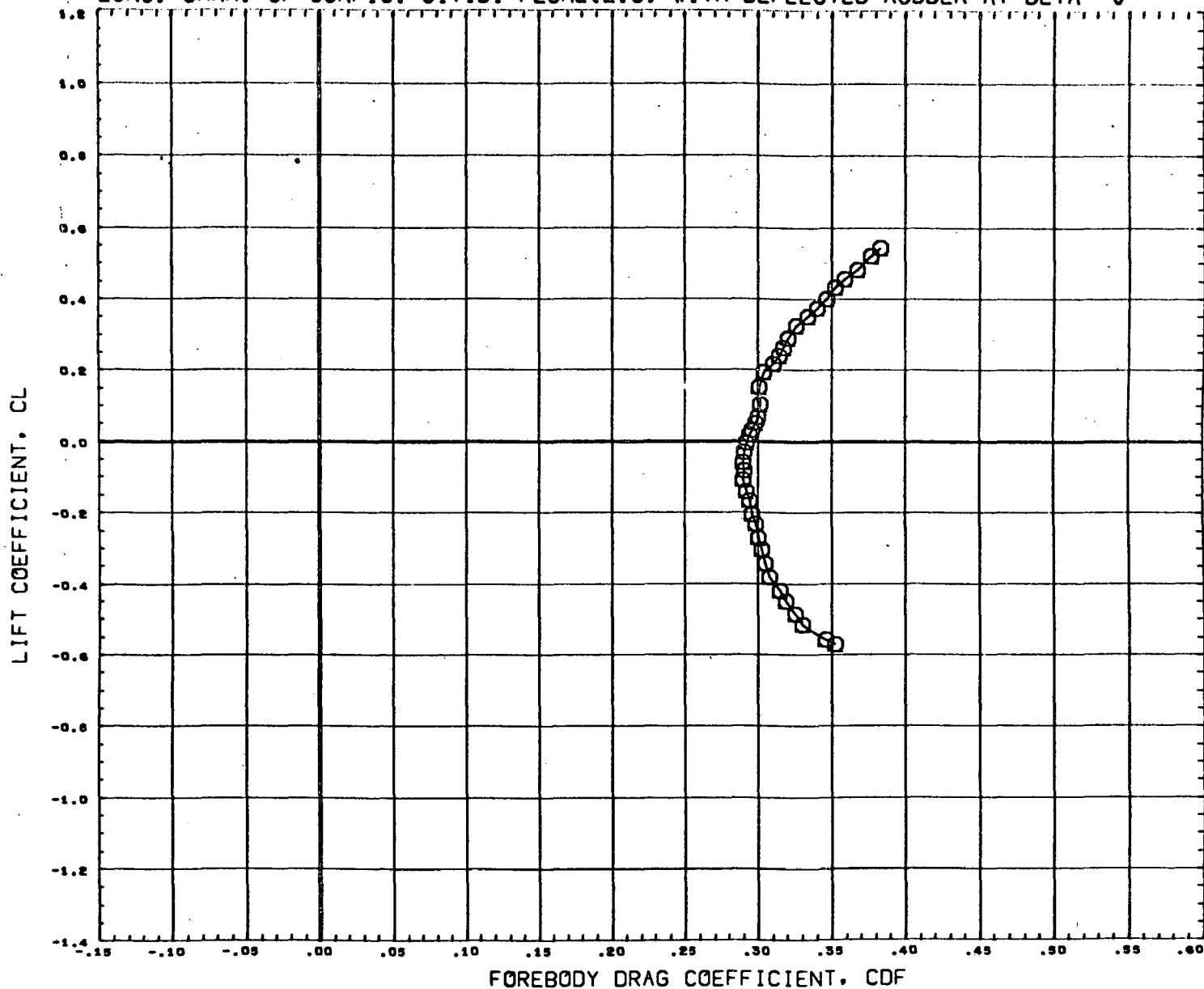


SYMBOL  $\bigcirc$  MACH 2.203 BETA 0.000 AILRON 0.000  
ELEVTR 0.000 RUDDER 10.000

REFERENCE INFORMATION  
SREF 3155.3040 SQ.FT.  
LREF 609.5004 IN.  
BREF 662.0004 IN.  
XMRP 557.0004 IN.  
YMRP 0.0000 IN.  
ZMRP 200.0004 IN.  
SCALE 0.0060

DATA HIST. CODE MVTV

# LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	2.203	BETA	0.000	AILRON	0.000
		ELEVTR	0.000	RUDDER	10.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	862.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE MVTV

MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)

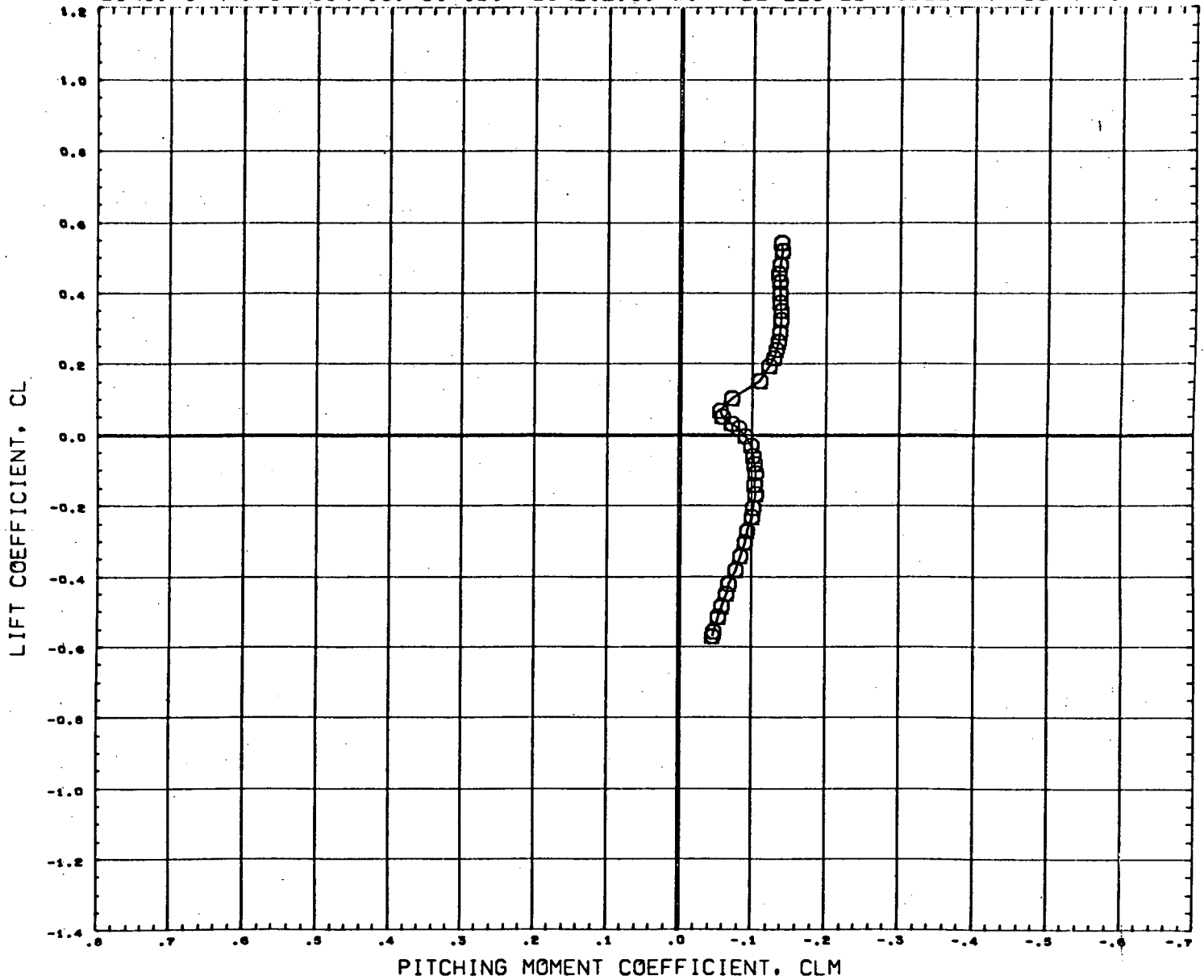
(CD7510)

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LONG. CHAR. OF CONFIG. 01T1B1+PLUME(2.5) WITH DEFLECTED RUDDER AT BETA = 0



SYMBOL MACH PARAMETRIC VALUES  
 O 2.203 BETA 0.000 AILRON 0.000  
 ELEVTR 0.000 RUDDER 10.000

REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0080

DATA HIST. CODE MVTV

MDAC S-222 COMPOSITE(T-CG) 01T1B1+PLUME(2.5)

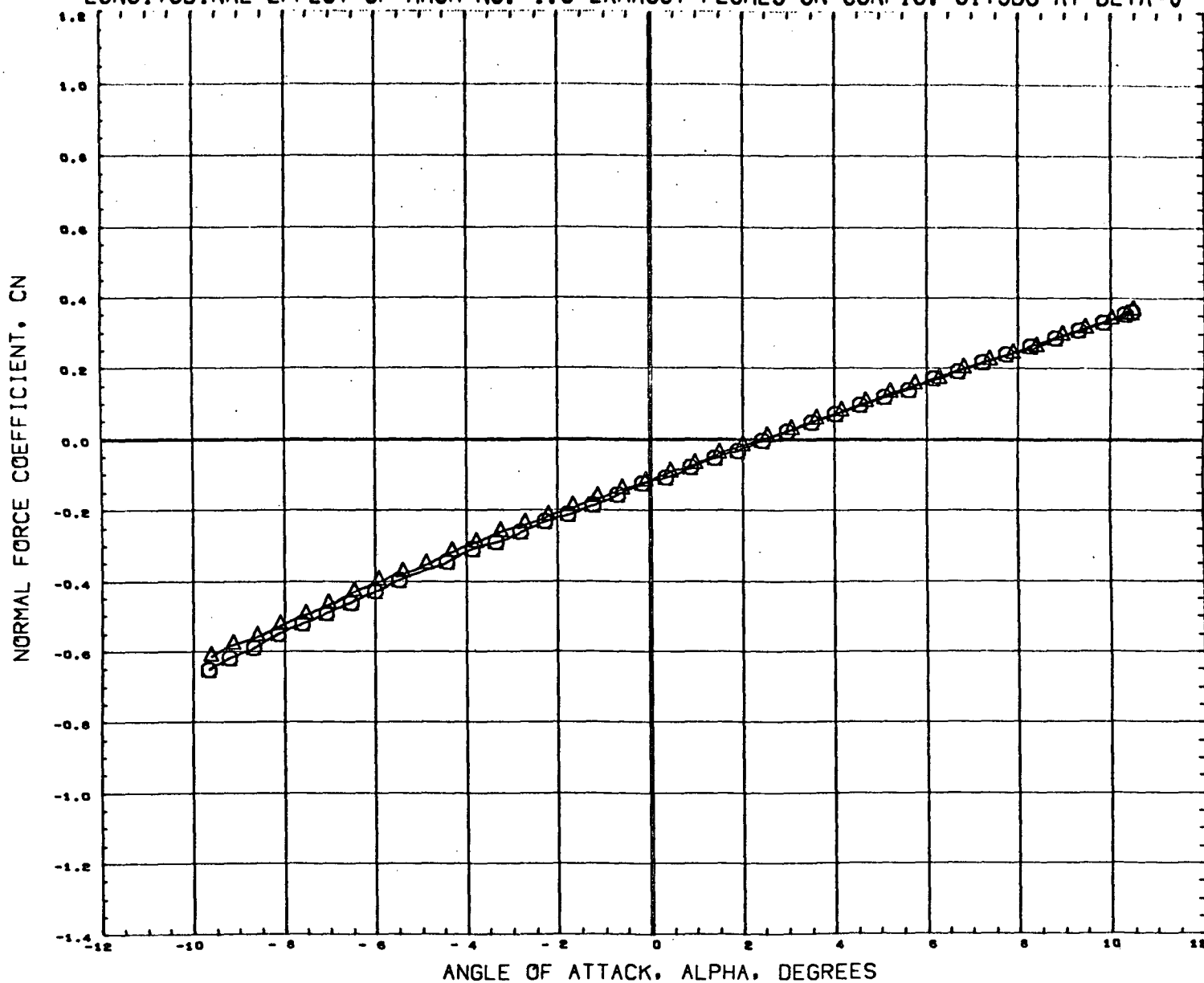
(CD7510)

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0

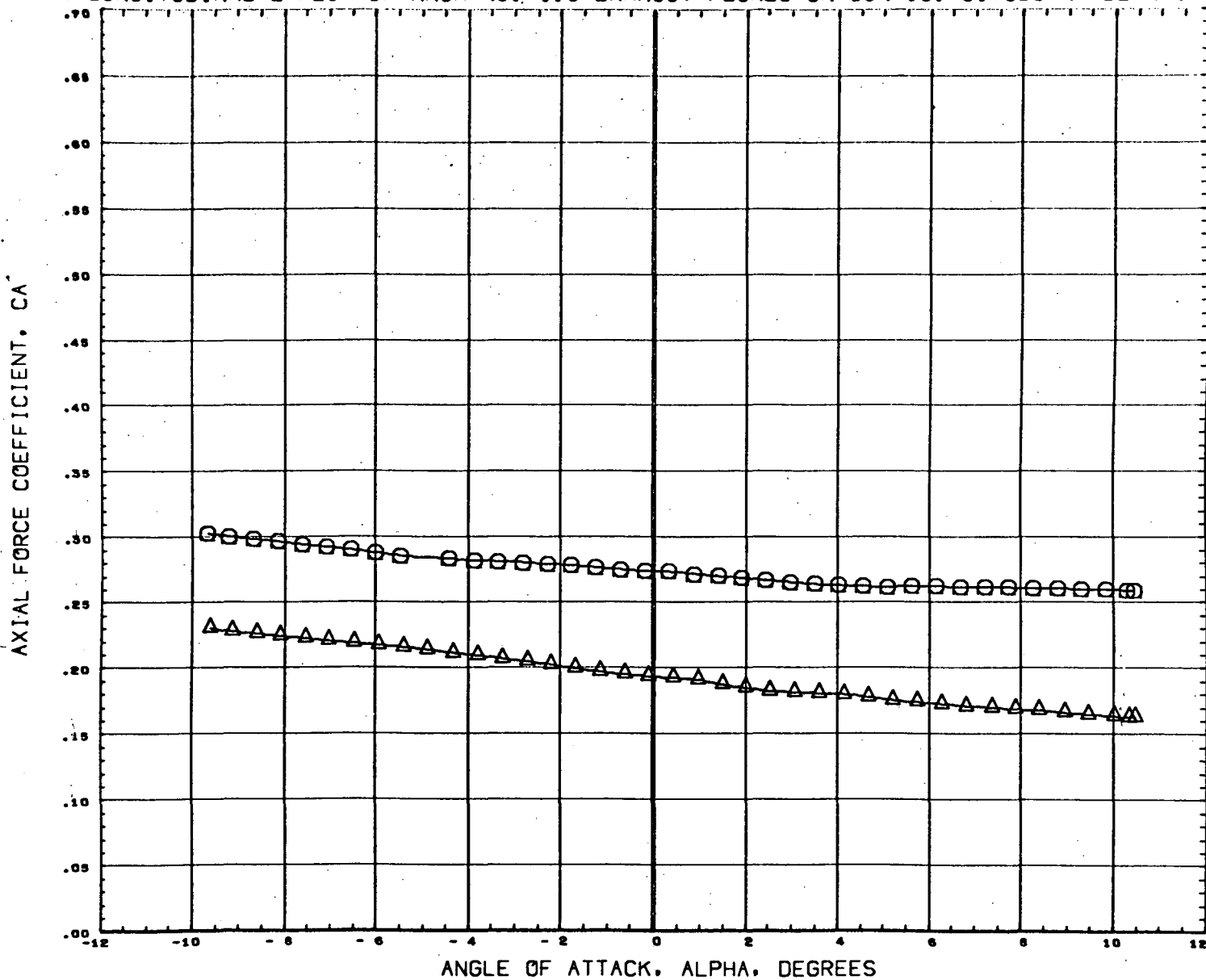


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE (T-C6) O1T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE (T-C6) O1T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMHP	557.0004 IN.
						YMHP	0.0000 IN.
						ZMHP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0

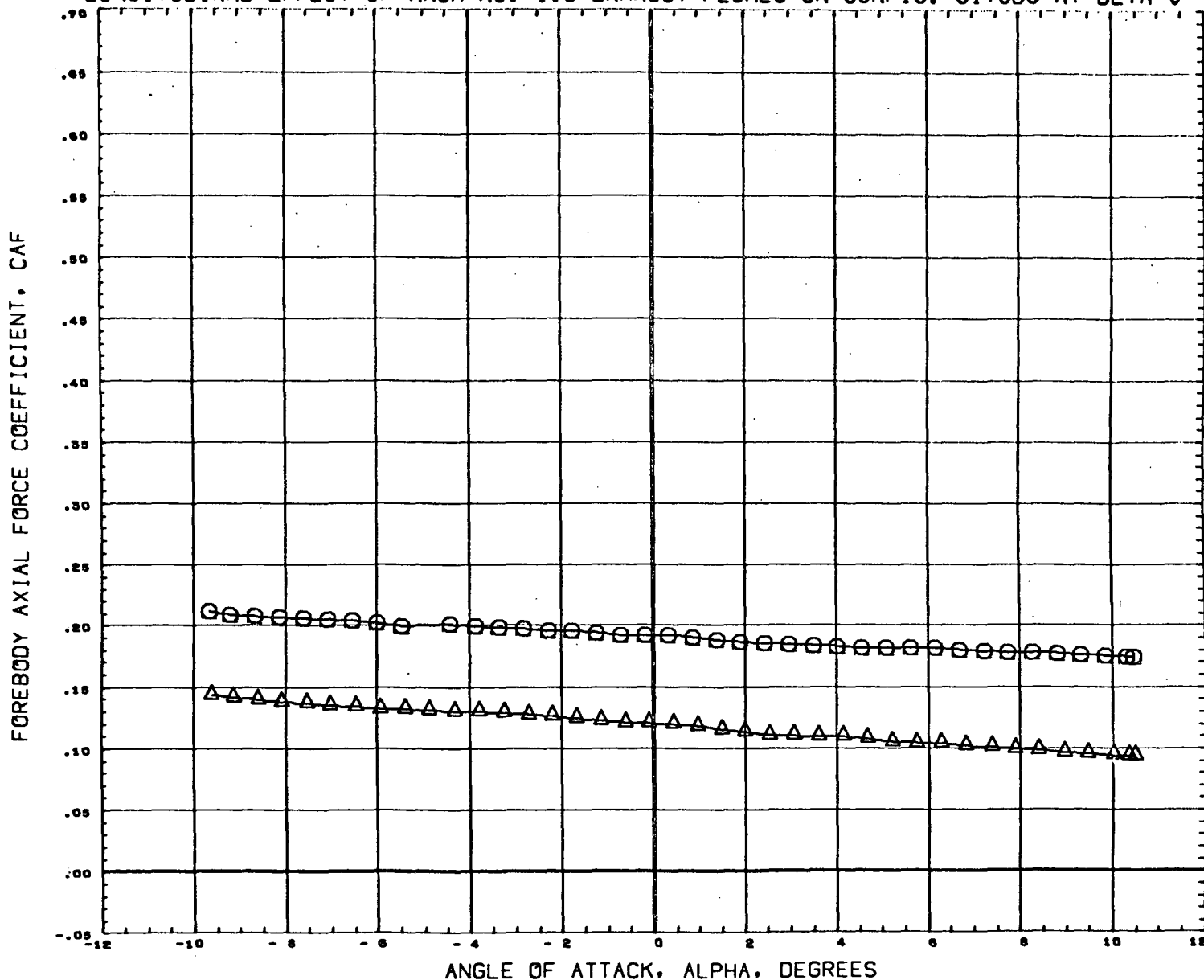


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0

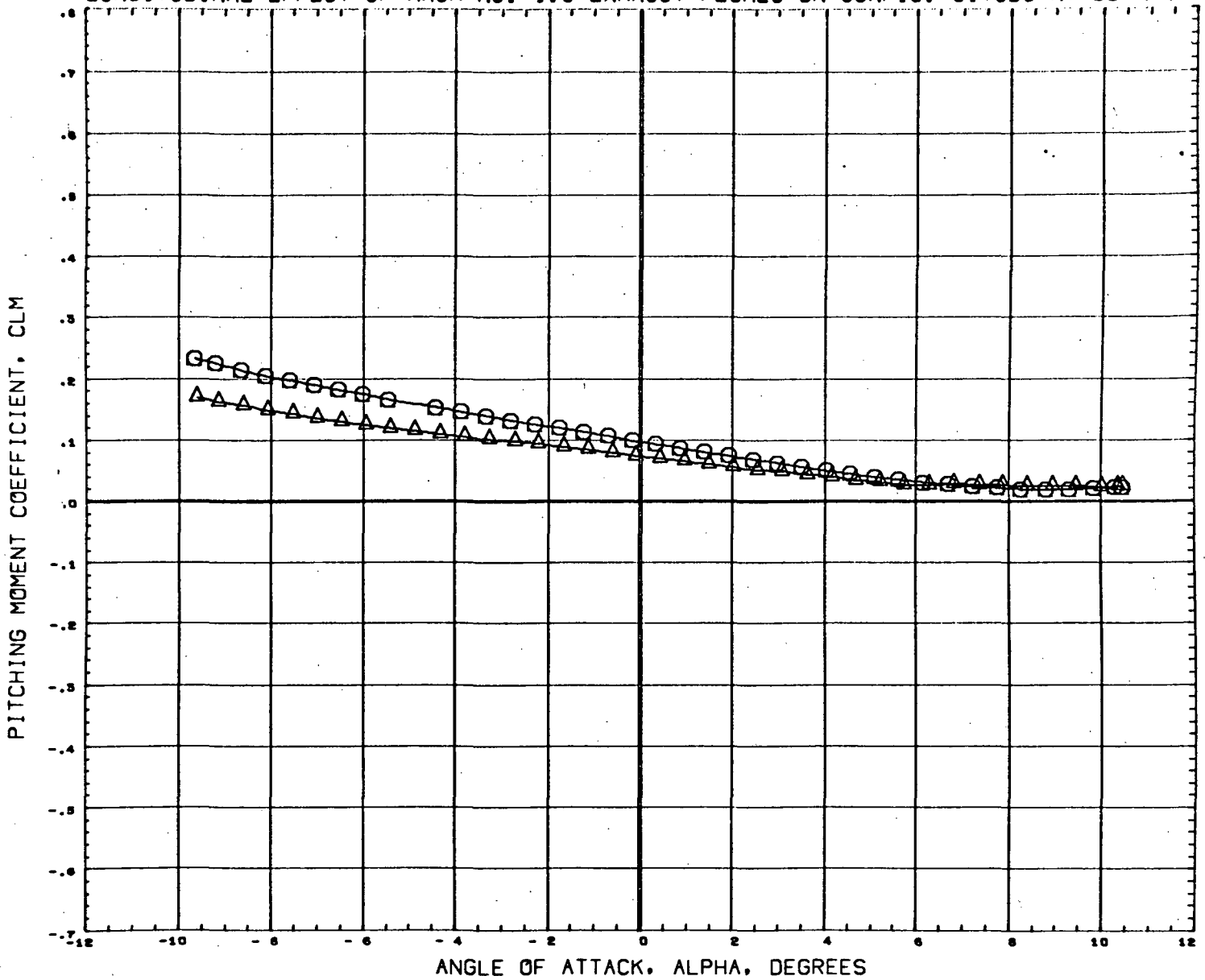


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0

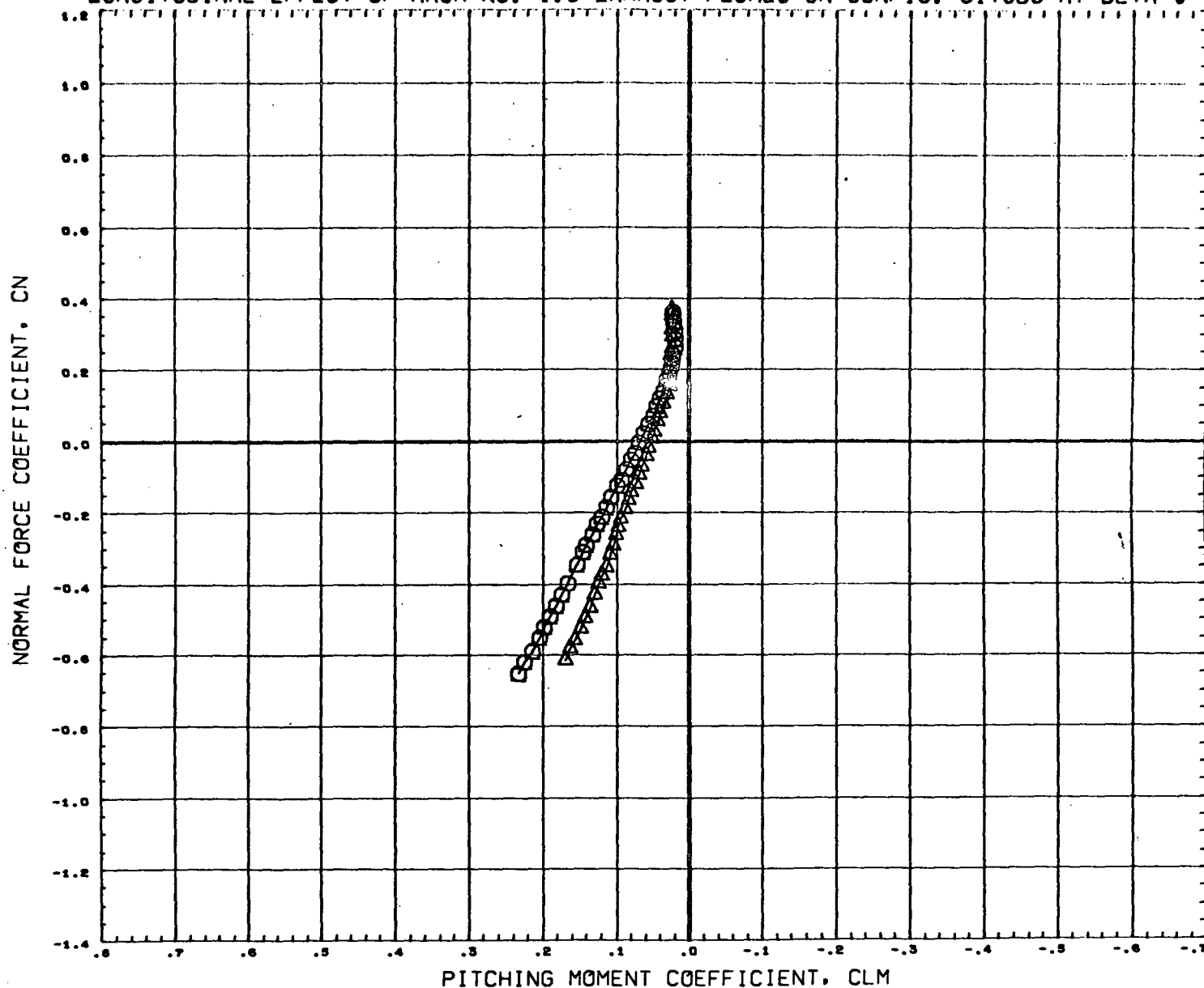


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0



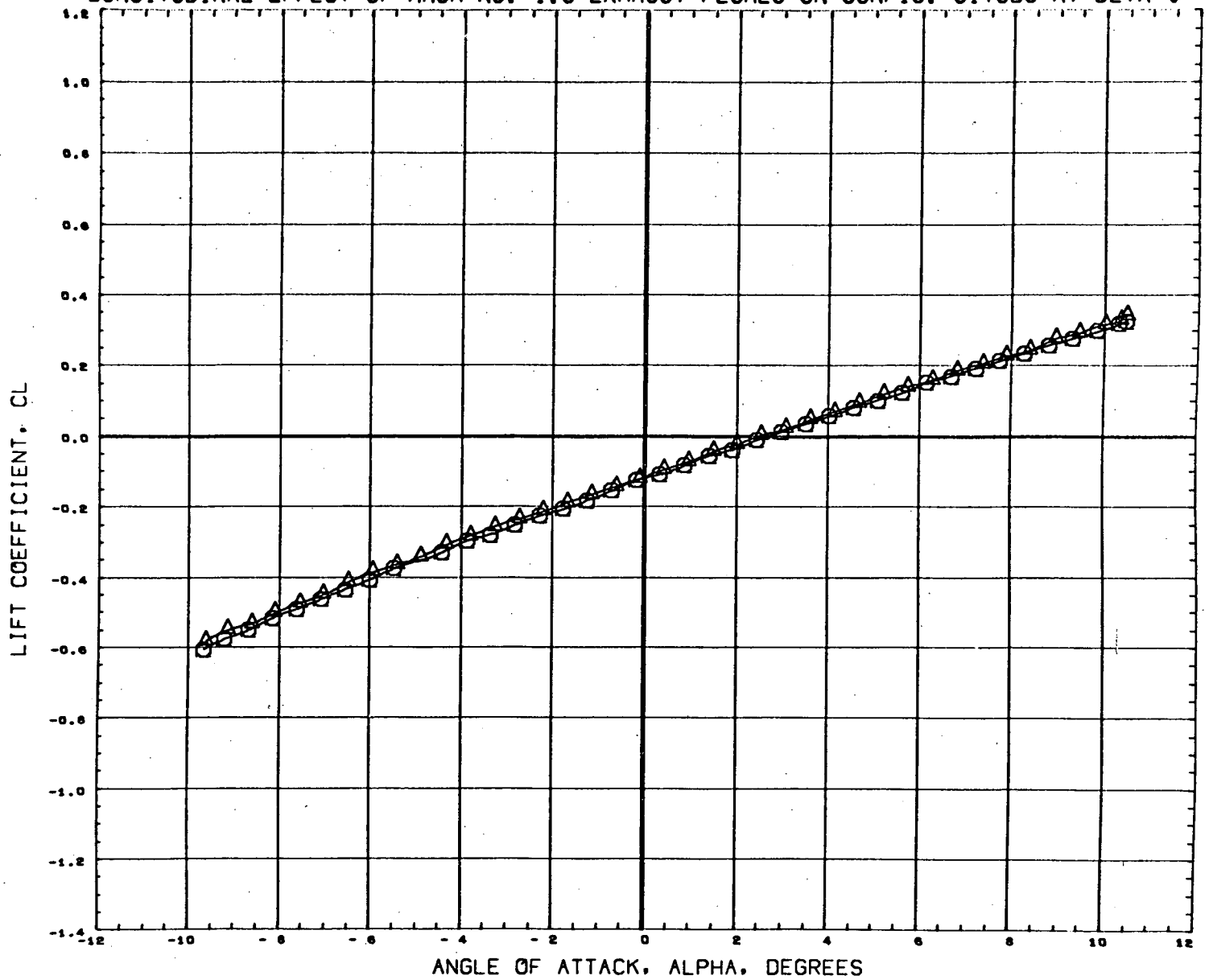
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0

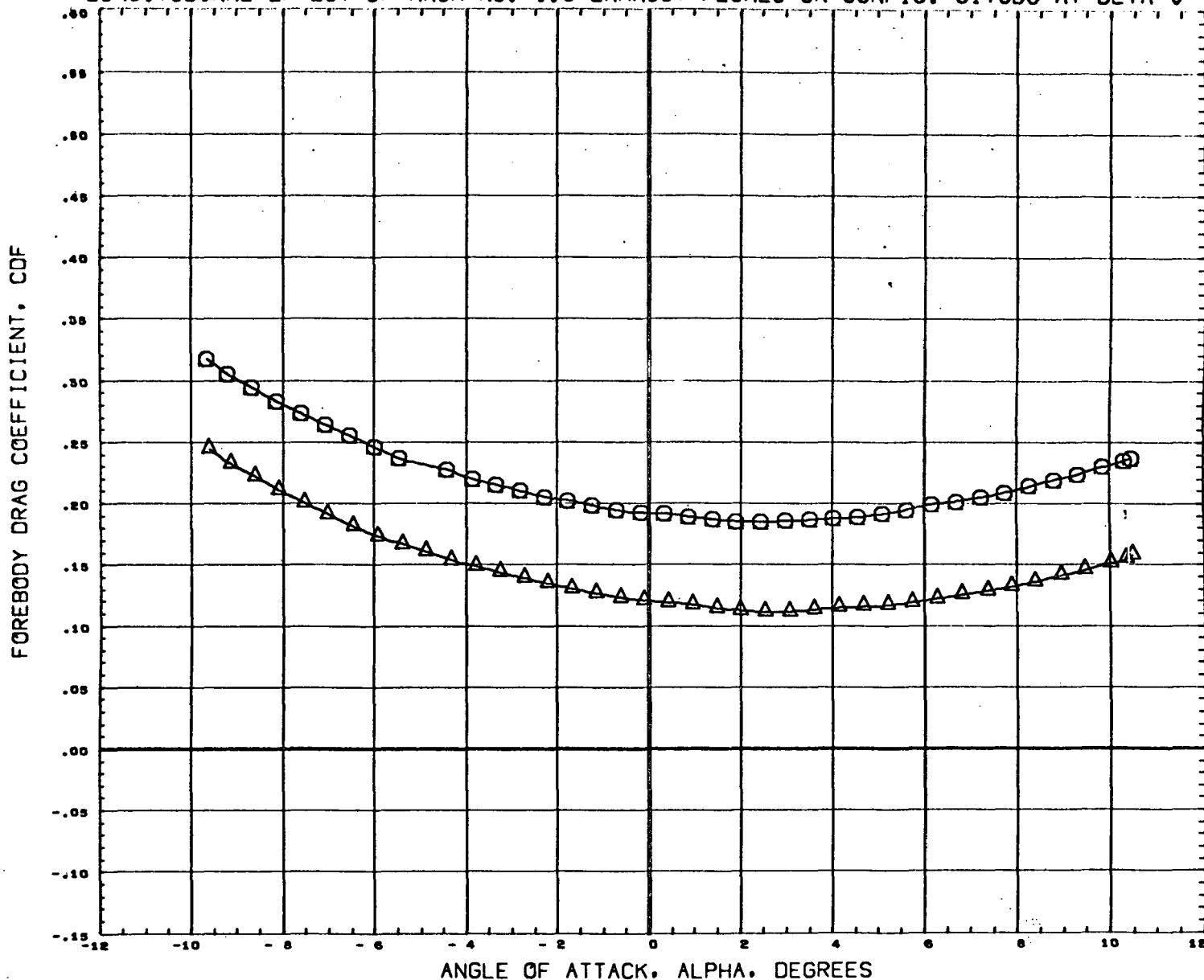


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0



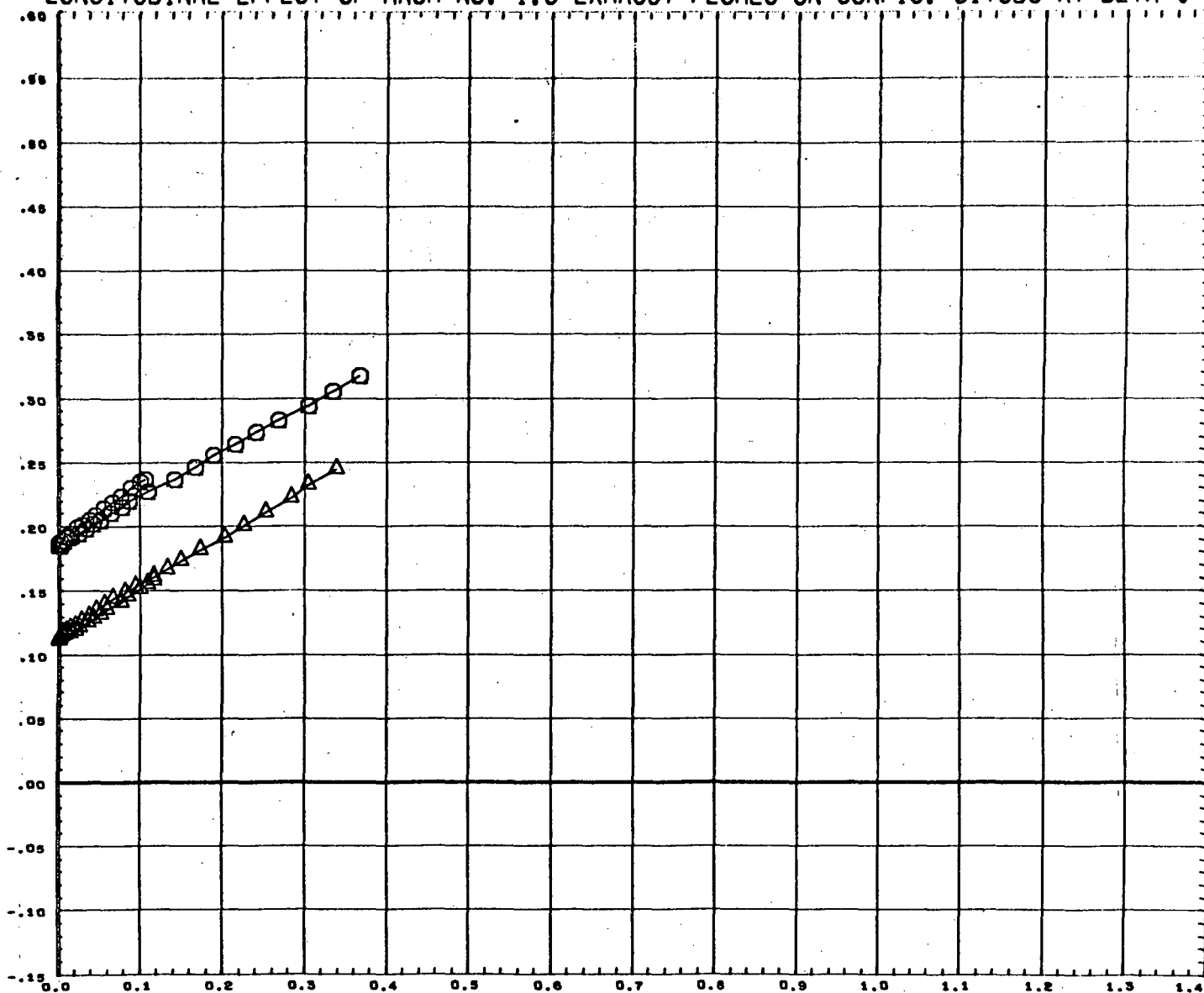
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0

FOREBODY DRAG COEFFICIENT, CDF



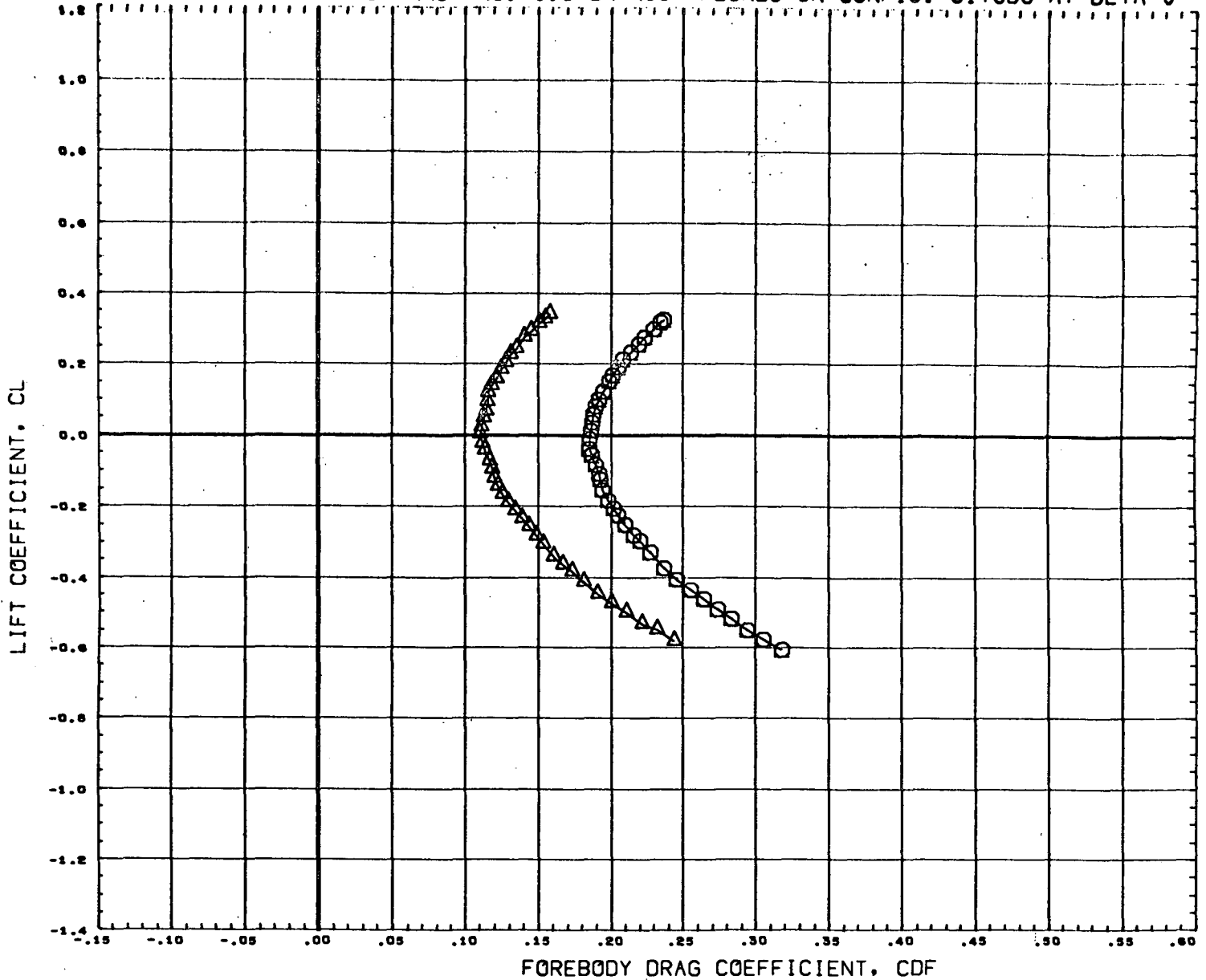
LIFT COEFFICIENT SQUARED, CLSQ

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5000 IN.
						BREF	662.0000 IN.
						XMRP	957.0000 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0000 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0

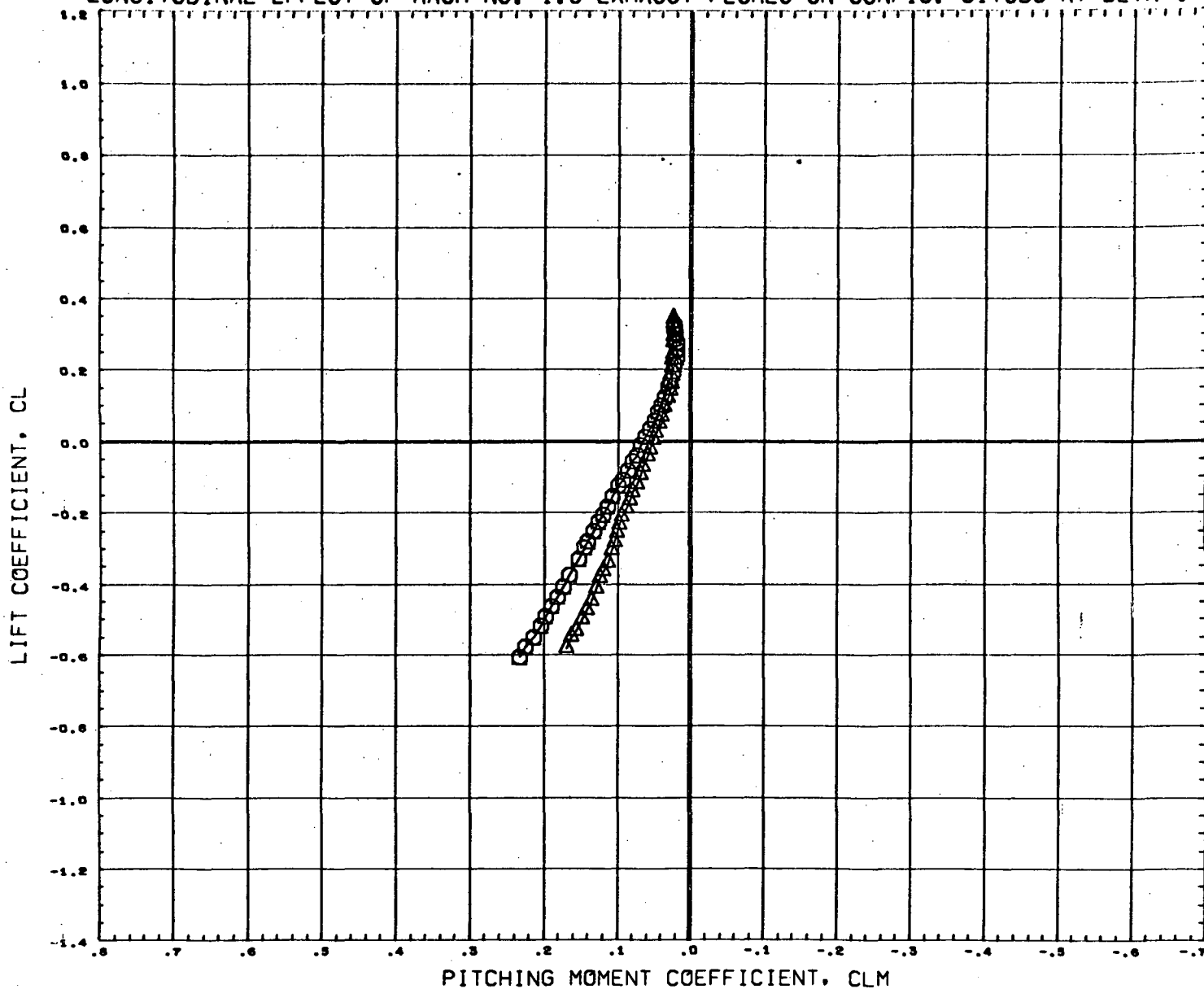


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH. 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA=0

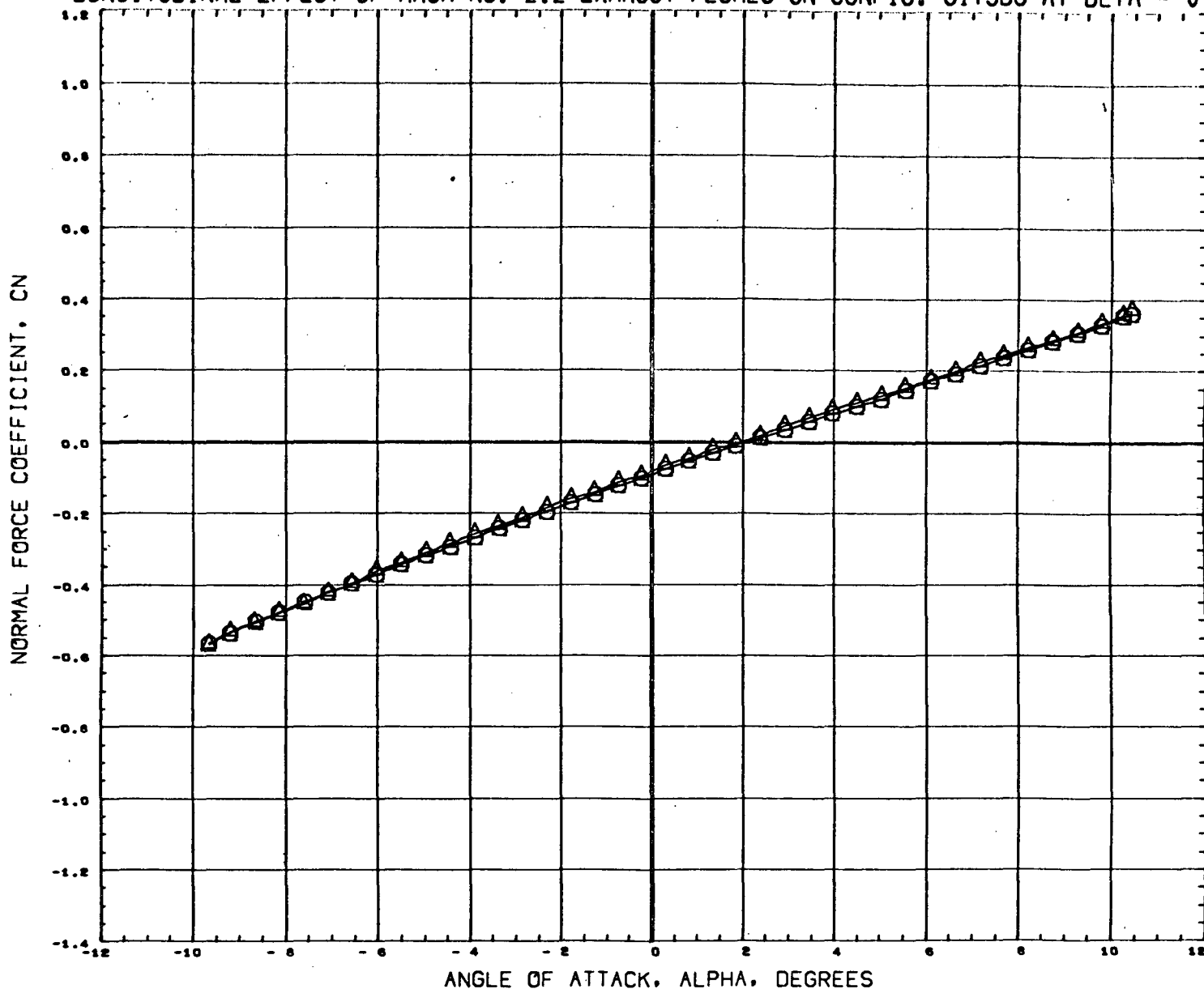


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7556)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

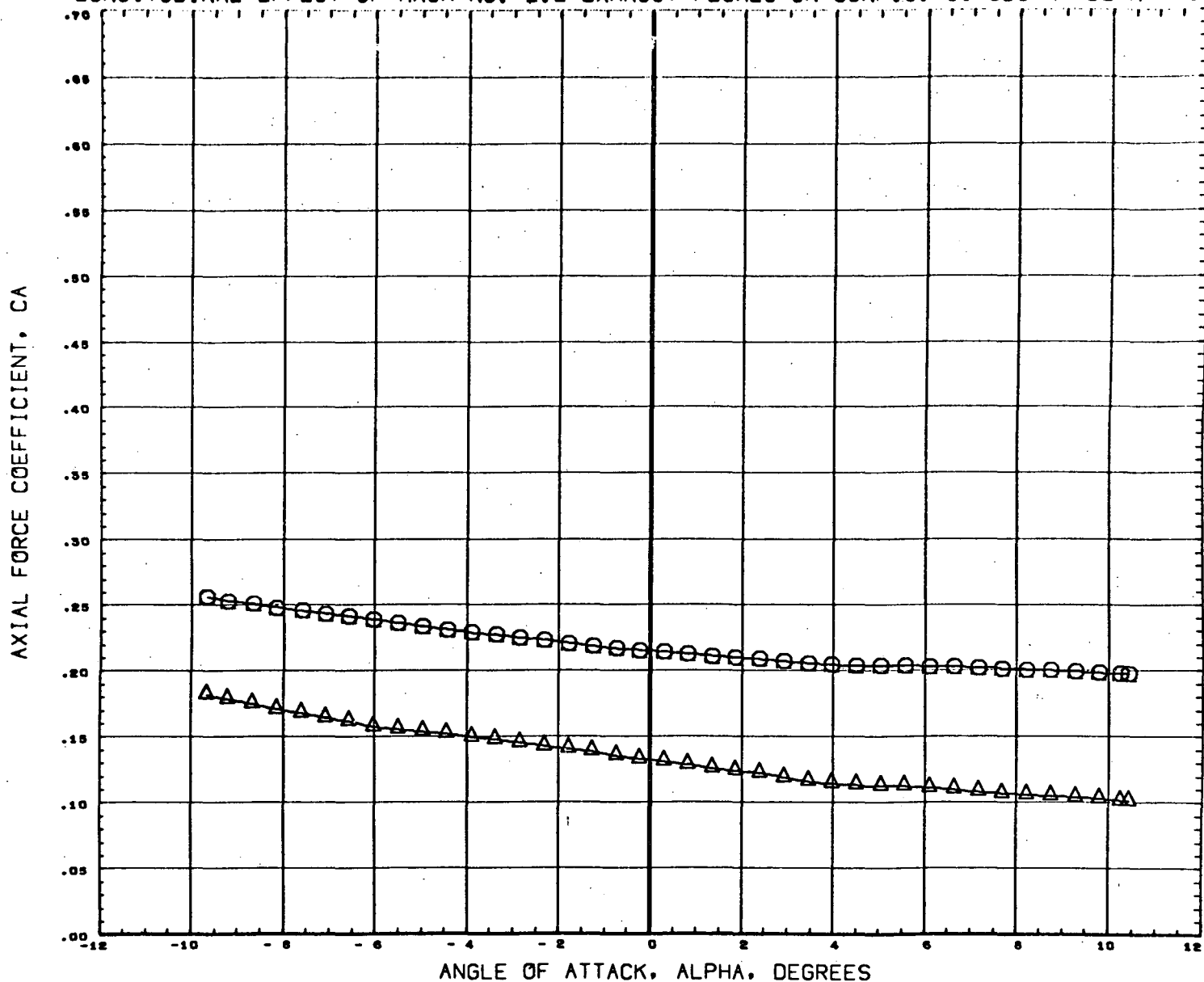


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7562)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

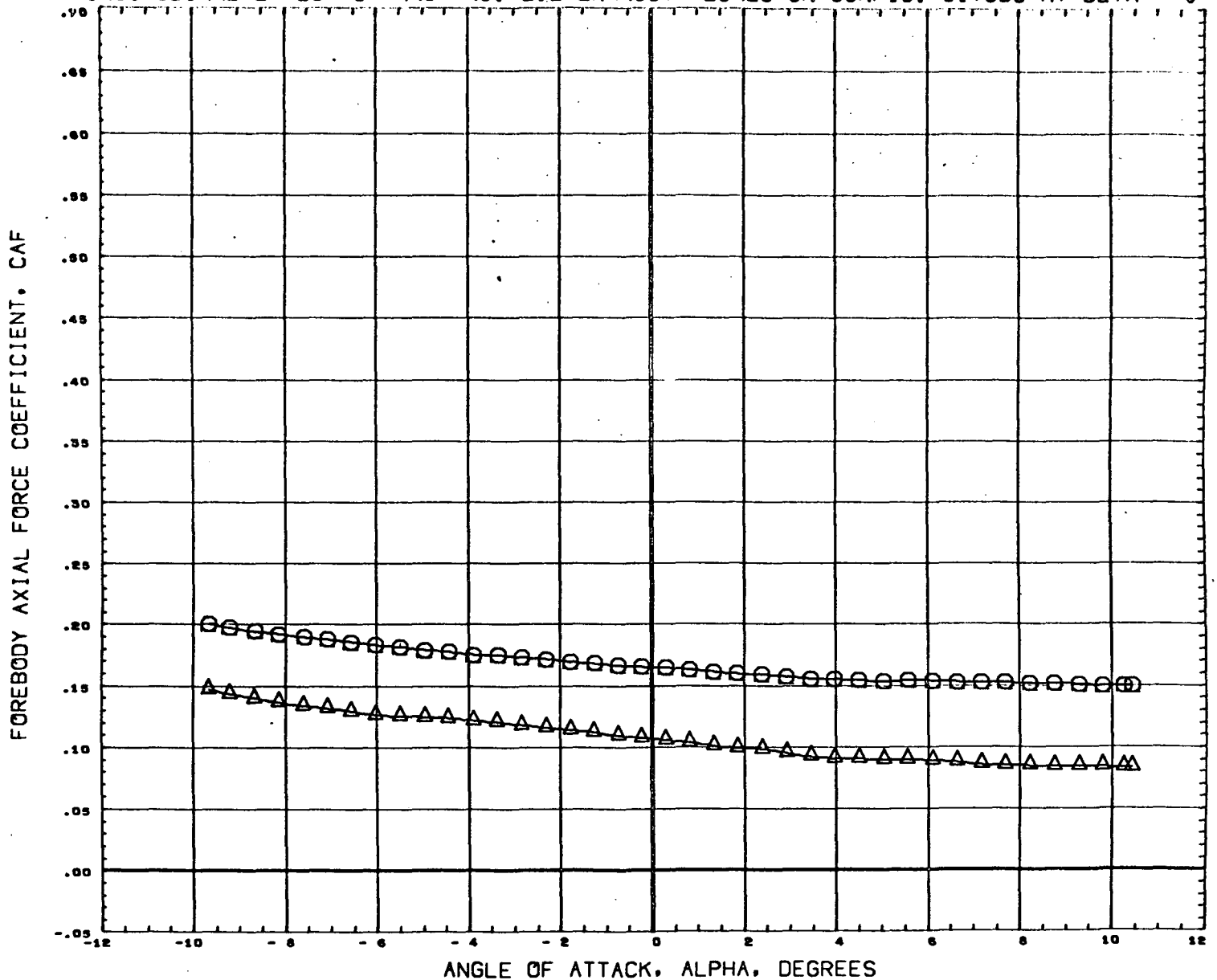


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07548)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07562)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMHP	557.0004 IN.
						YMHP	0.0000 IN.
						ZMHP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

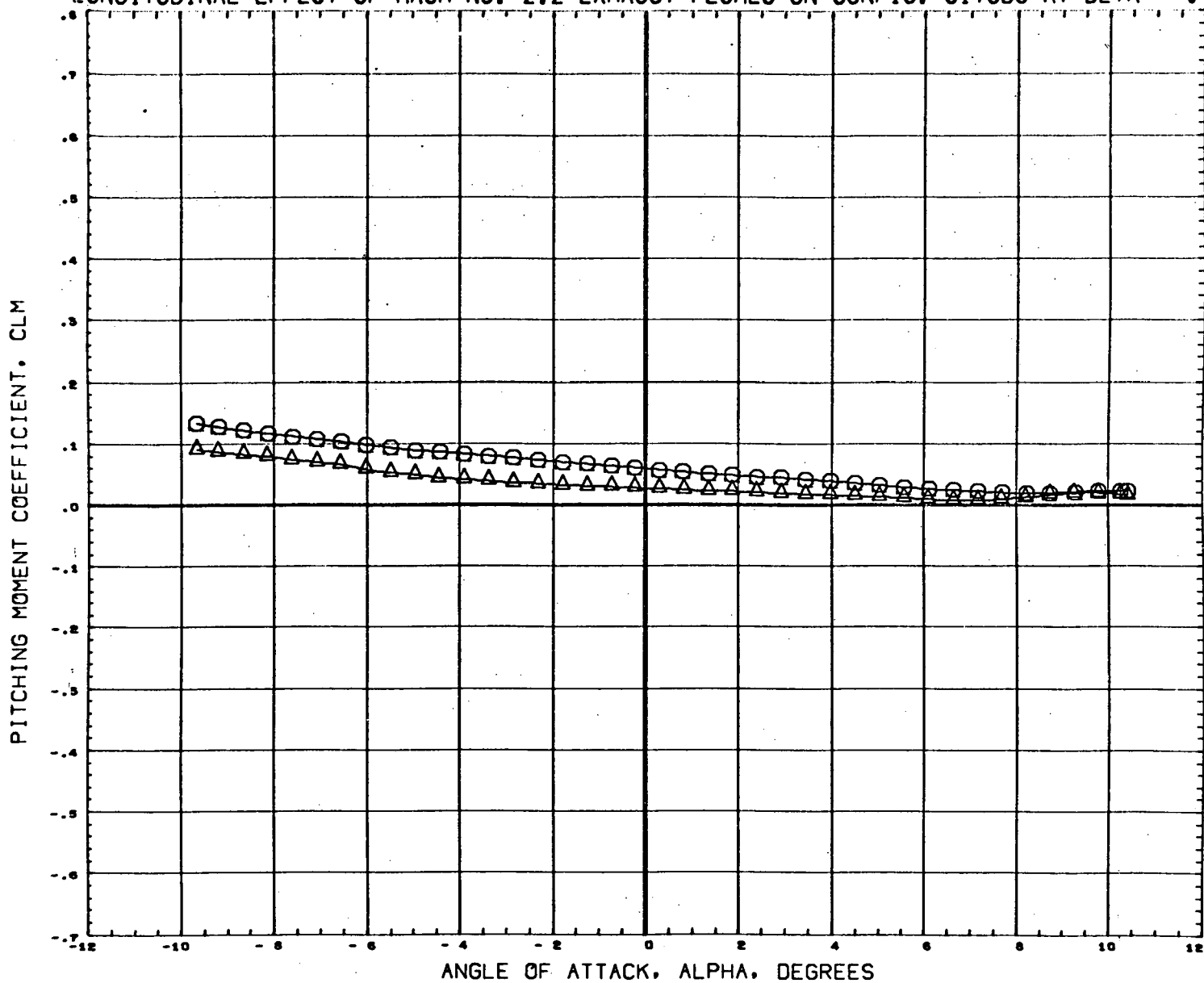


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(CD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7562)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004	IN.
						BREF	862.0004	IN.
						XMRP	957.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20



# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

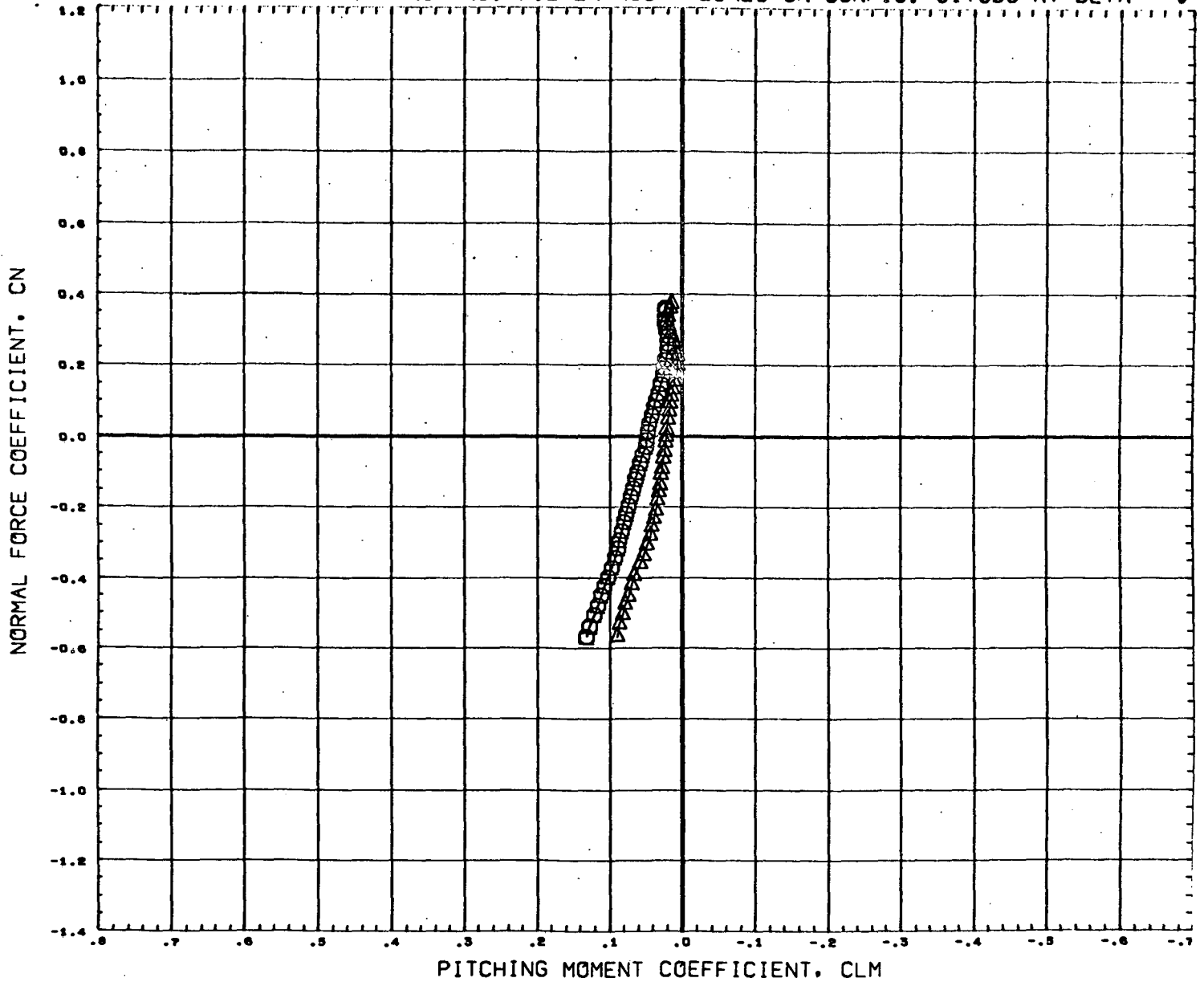


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7562)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

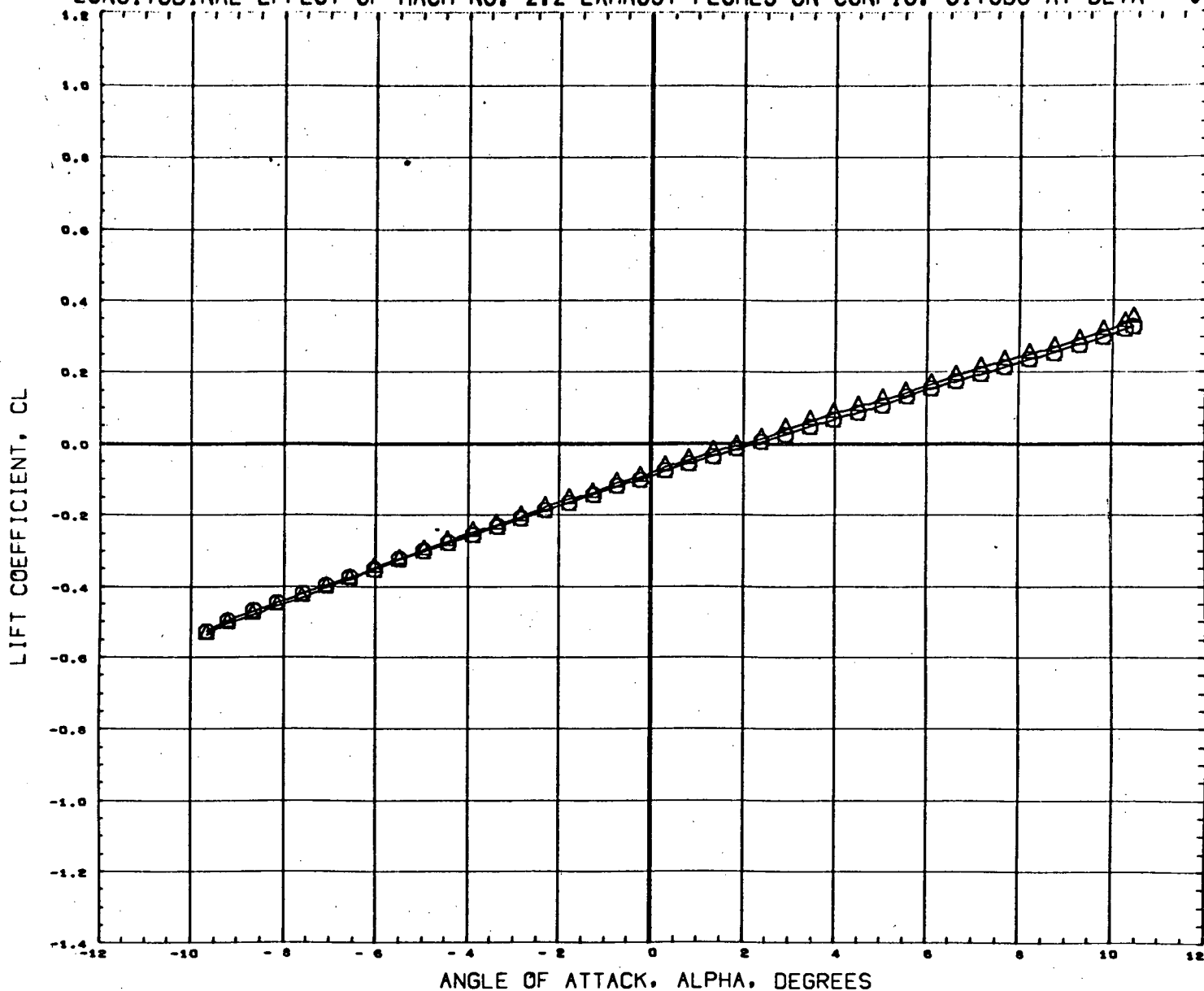


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7346)	MDAC S-222 COMPOSITE(T-C6) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7362)	MDAC S-222 COMPOSITE(T-C6) 01T3B6+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

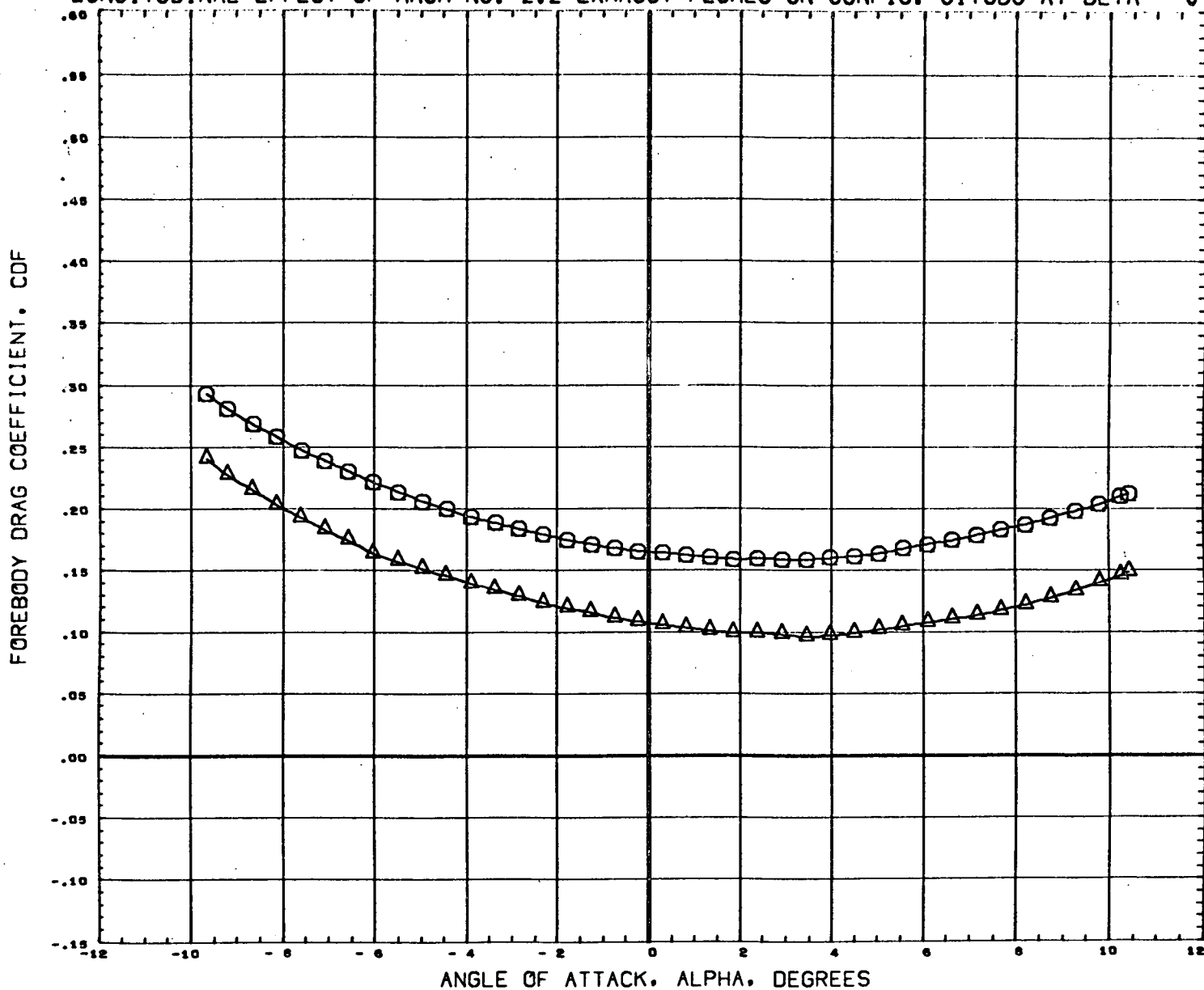


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE(T-C6) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7562)	MDAC S-222 COMPOSITE(T-C6) 01T3B6+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0



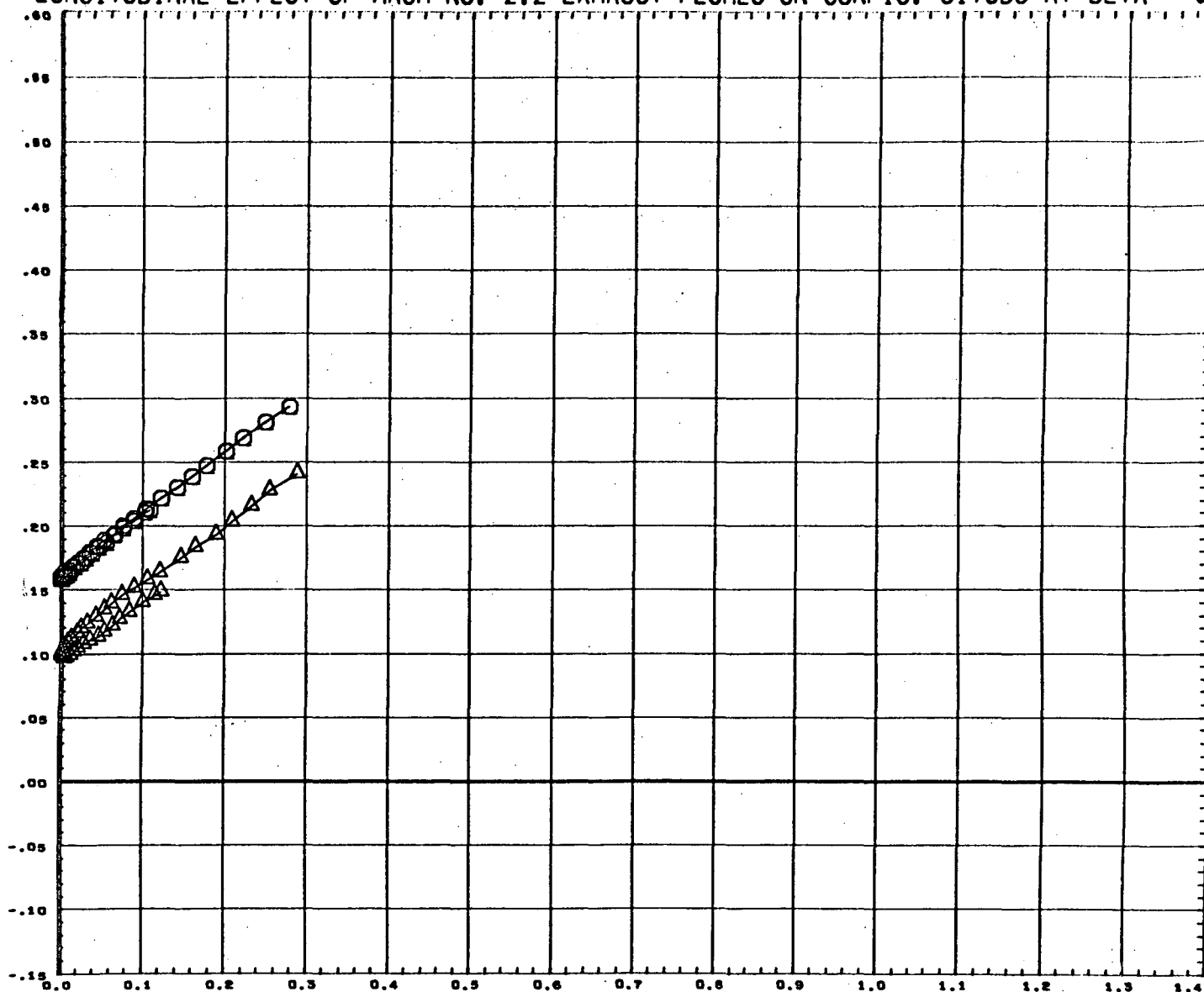
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7546)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7562)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	662.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



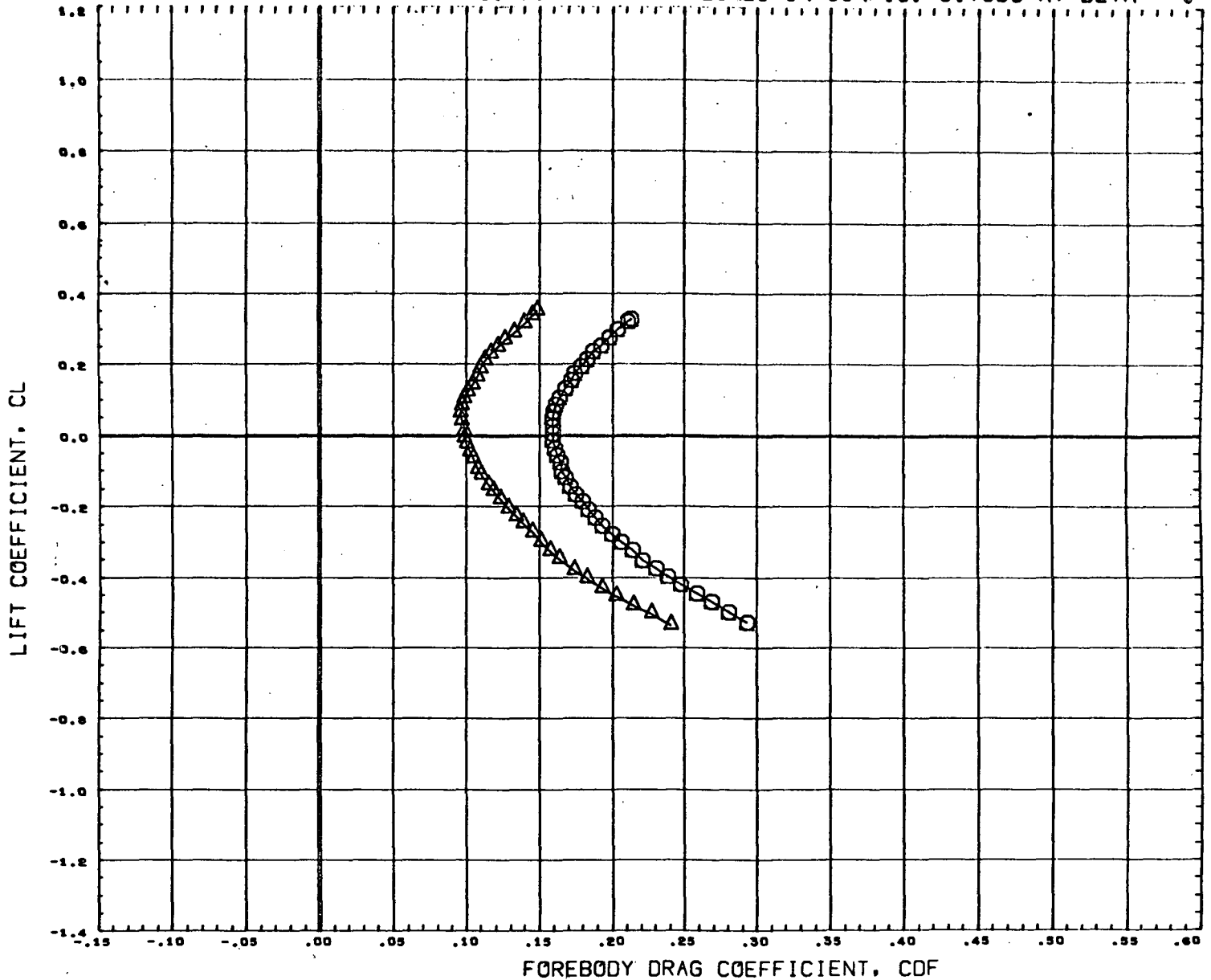
LIFT COEFFICIENT SQUARED, CLSQ

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7562)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

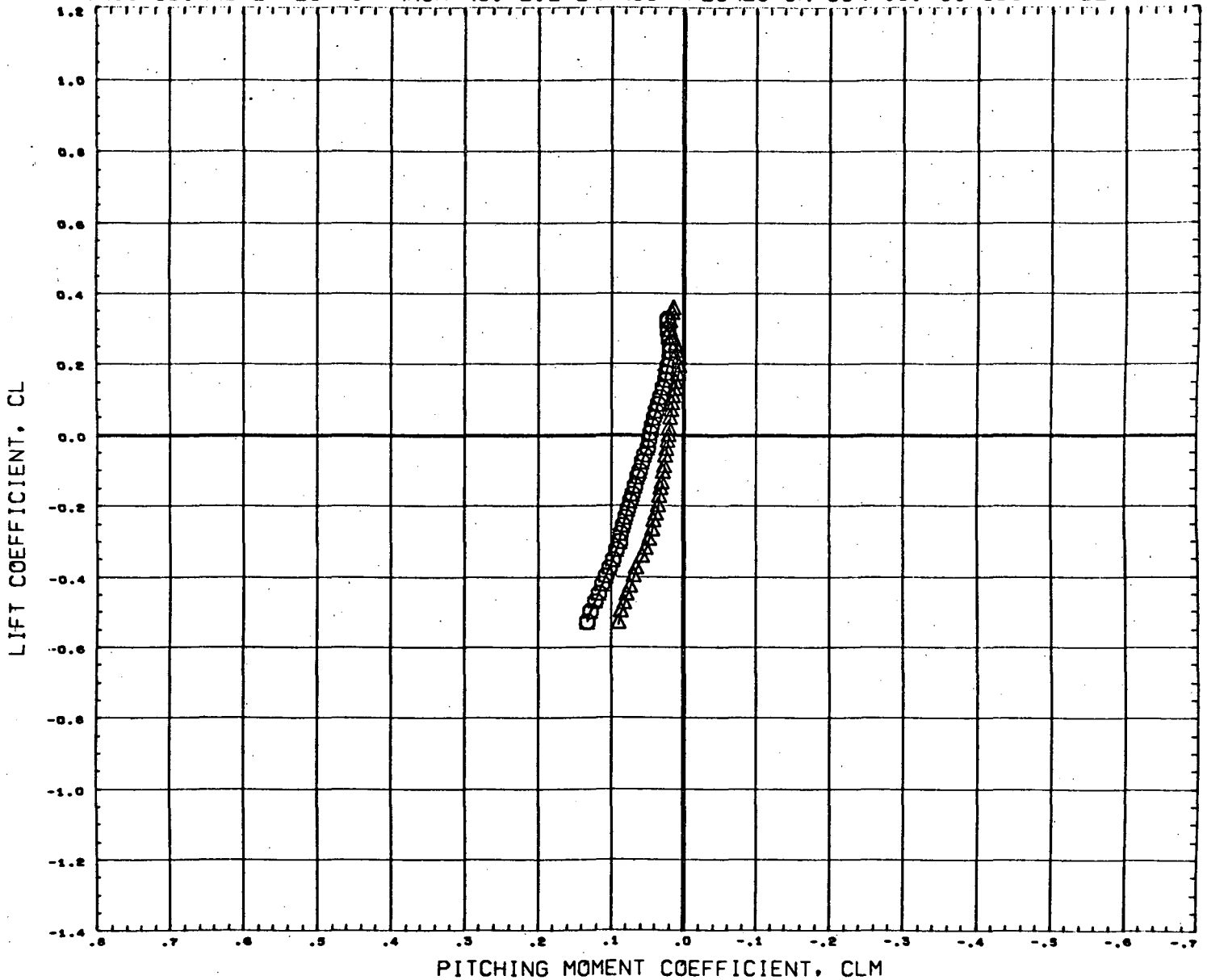


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7562)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT BETA = 0

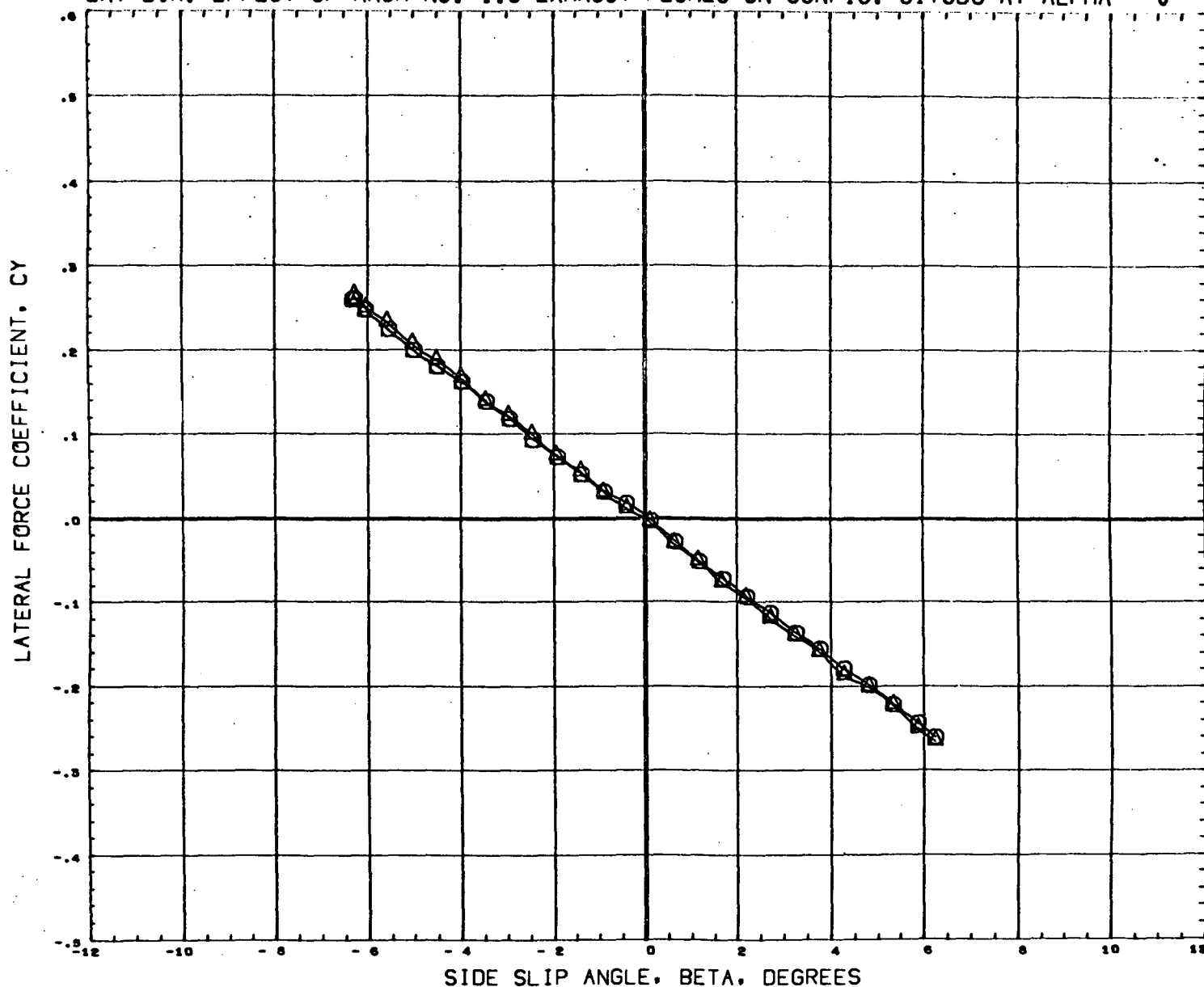


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3195.3040 SQ.FT.
(CD7562)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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LAT-DIR. EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT ALPHA = 0



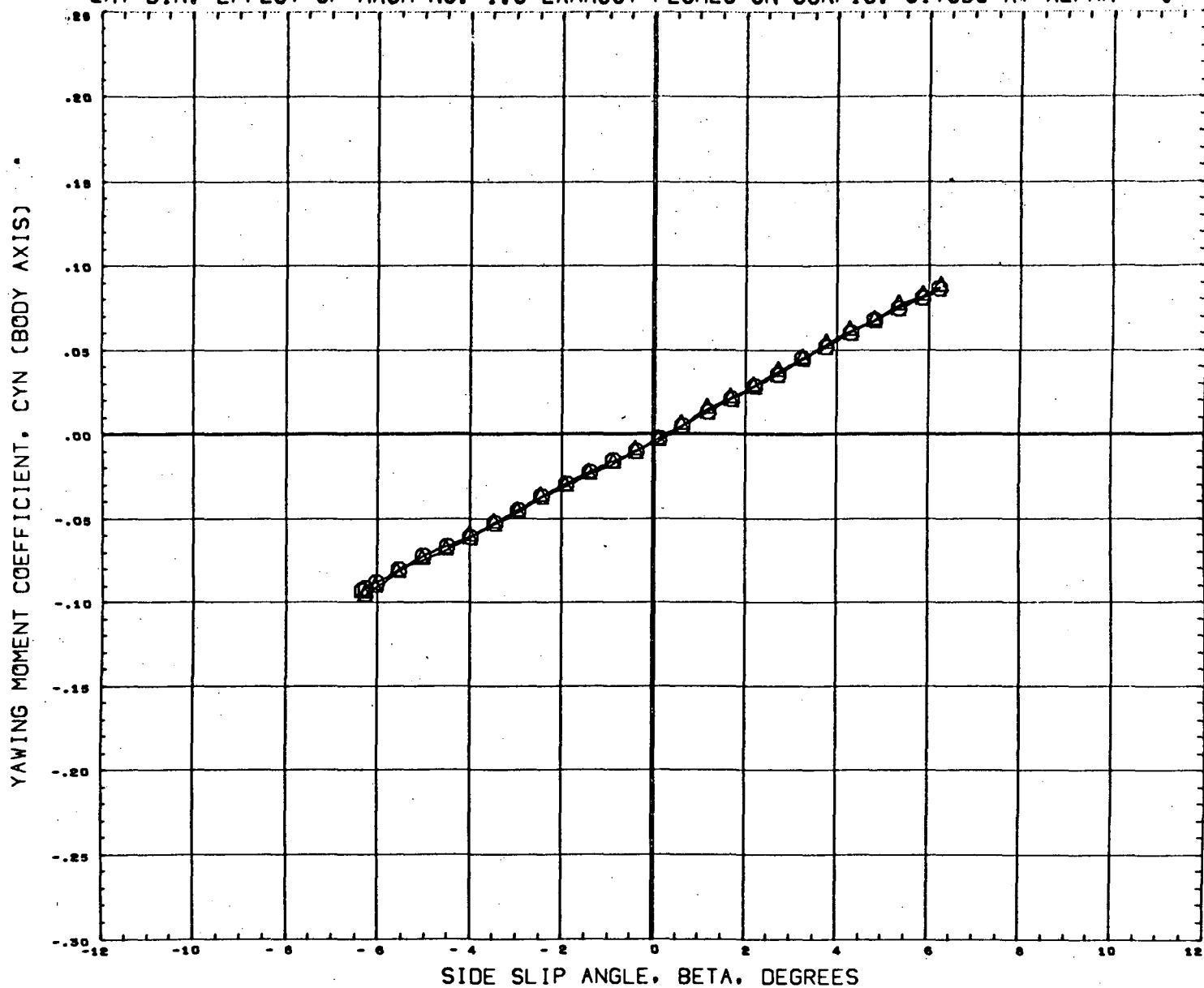
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7557)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.9004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT ALPHA = 0

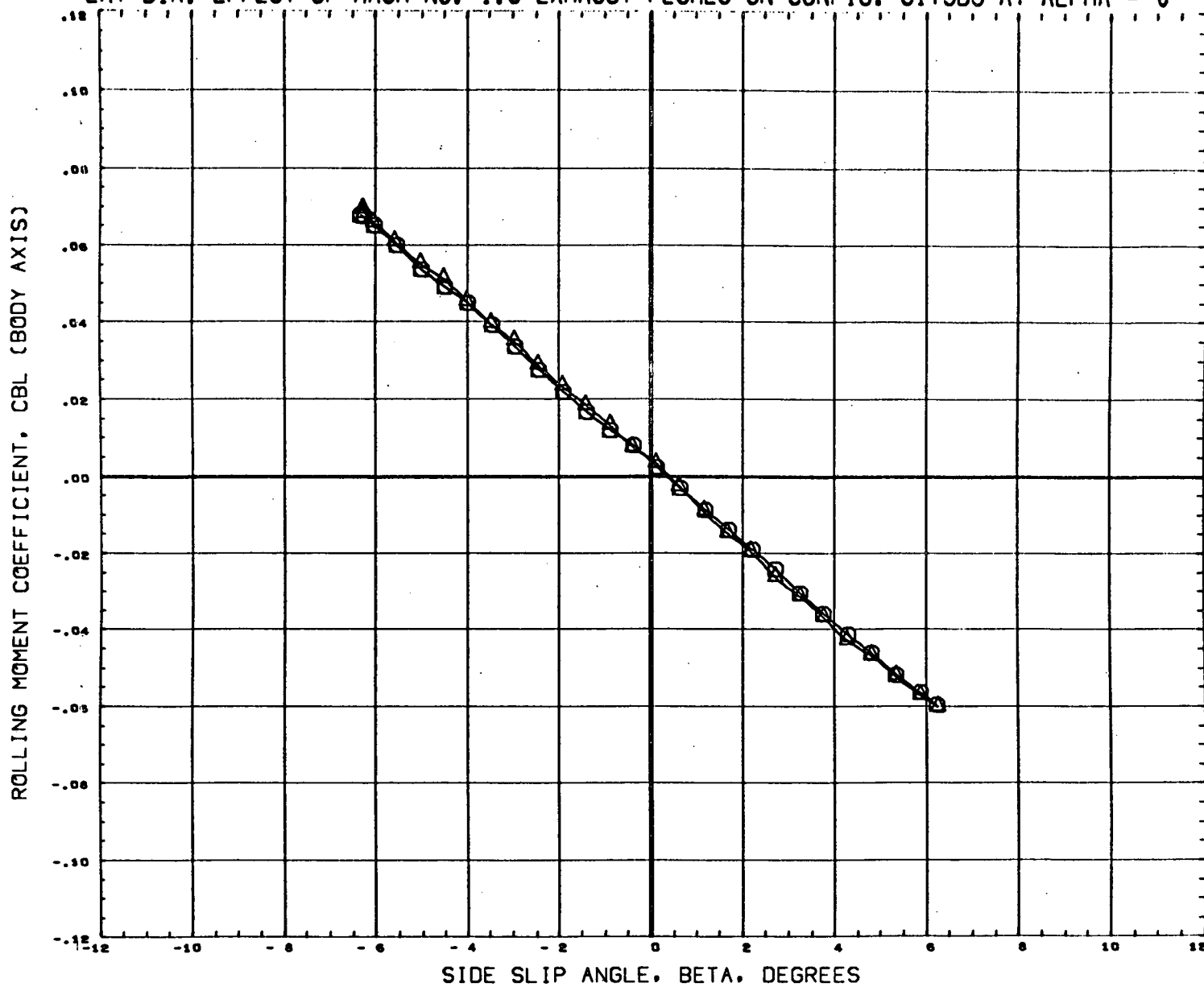


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7557)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	662.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT ALPHA = 0

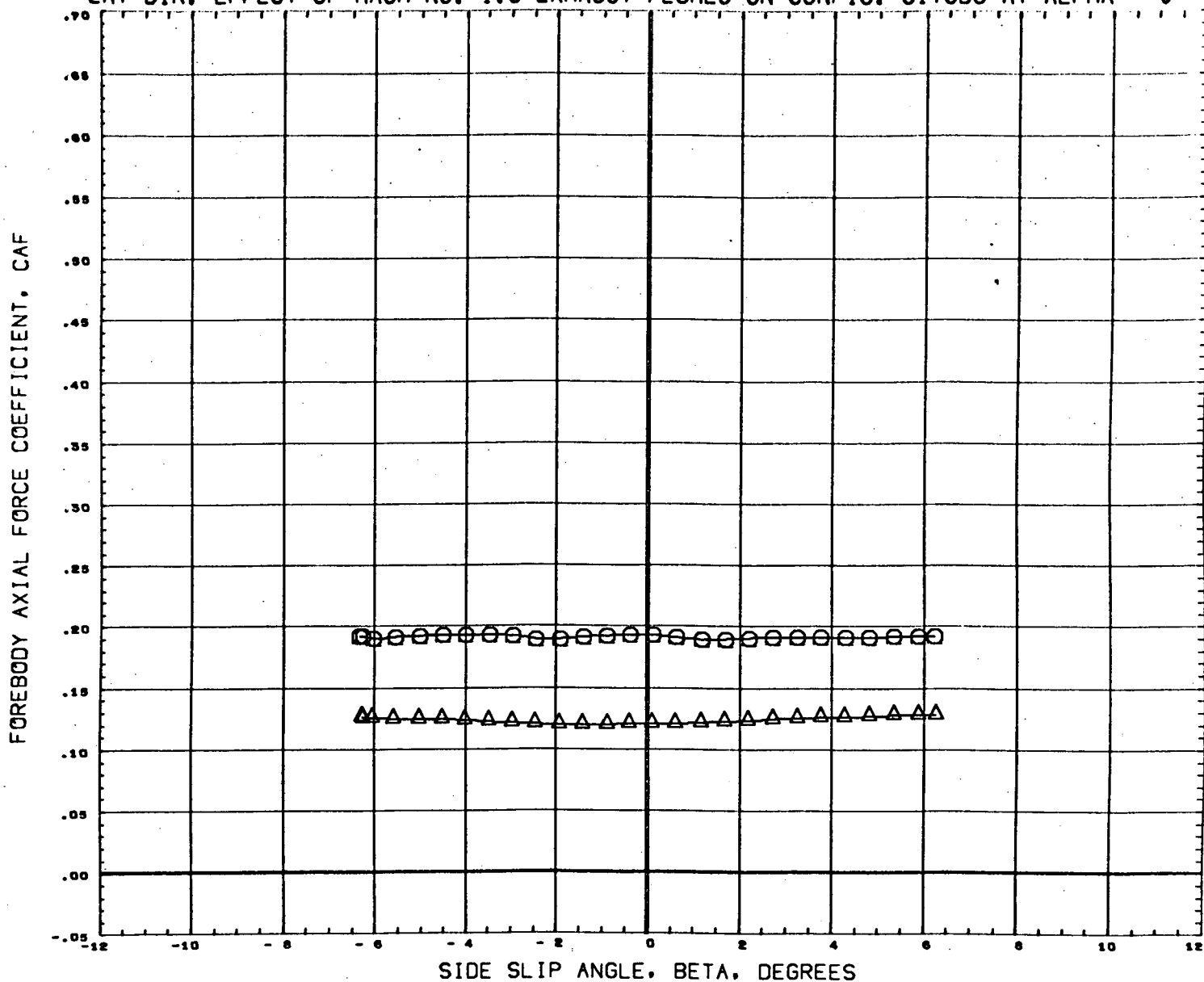


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040	50.FT.
(RD7557)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004	IN.
						BREF	882.0004	IN.
						XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# LAT-DIR. EFFECT OF MACH NO.=1.5 EXHAUST PLUMES ON CONFIG. 01T3B6 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
(RD7549) MDAC S-222 COMPOSITE (T-CG) 01T3B6  
(RD7557) MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)

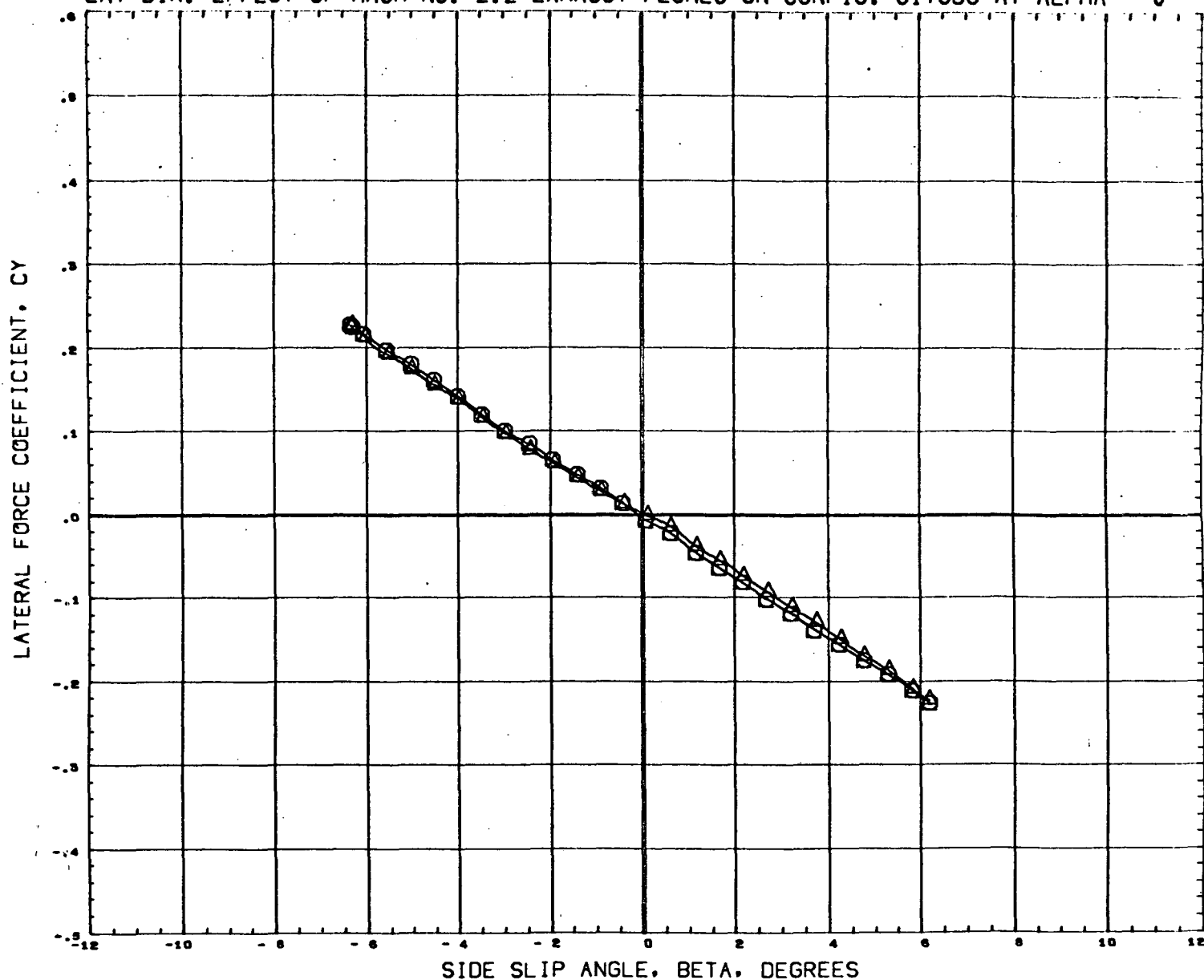
ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	662.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH 1.51

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# LAT-DIR. EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT ALPHA = 0

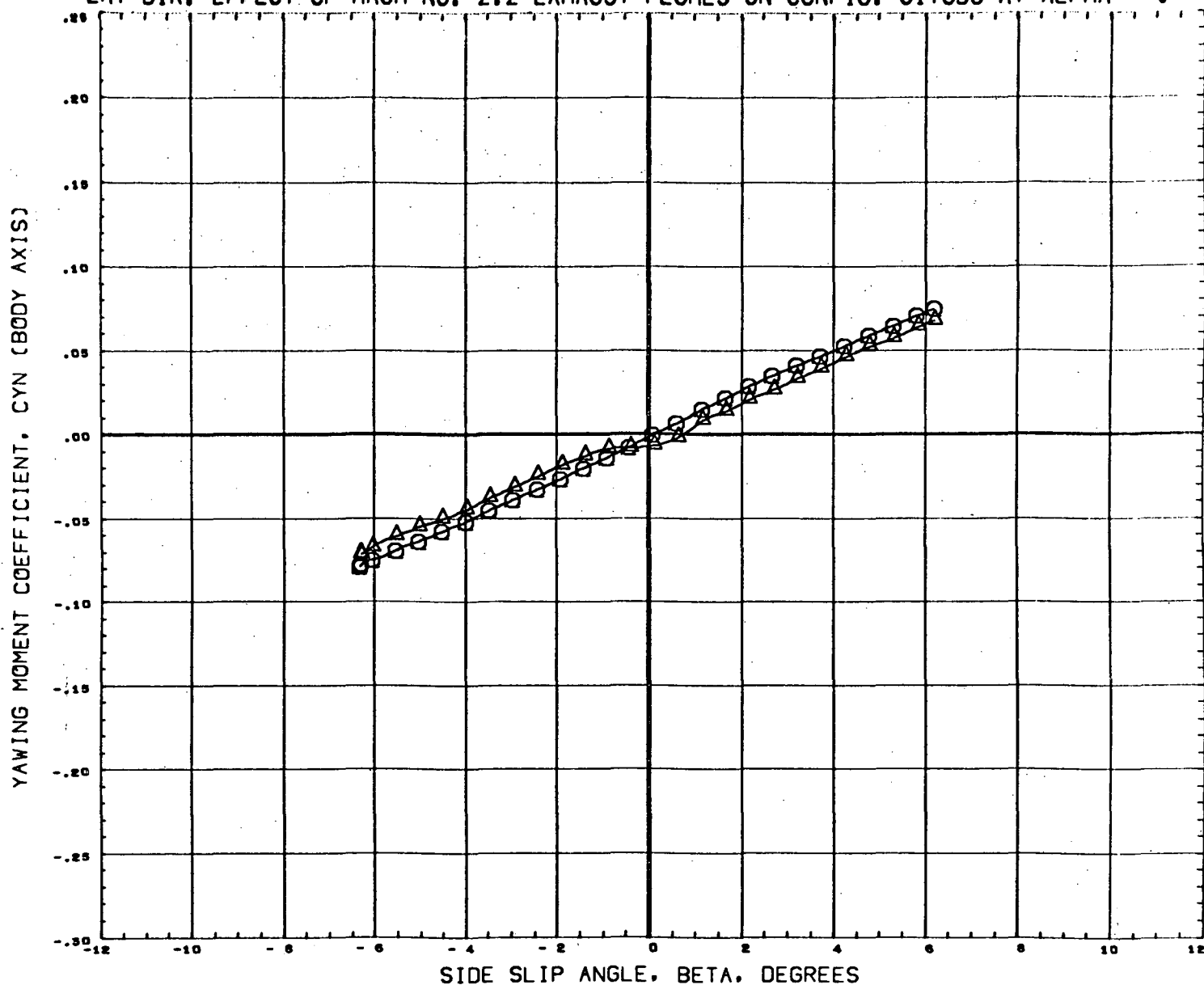


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7563)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	957.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	800.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LAT-DIR. EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT ALPHA = 0

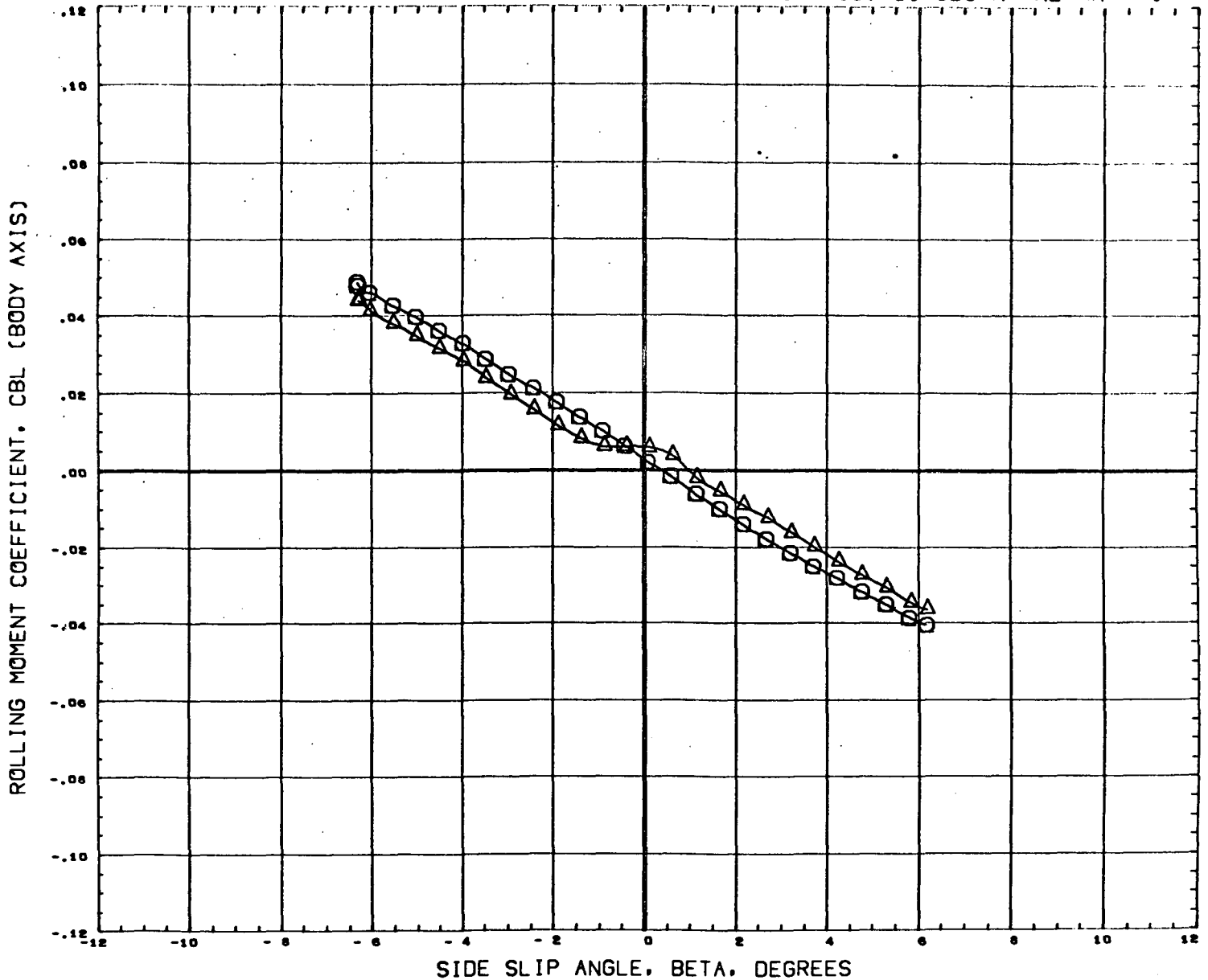


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RDY549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RDY563)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LAT-DIR. EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT ALPHA = 0

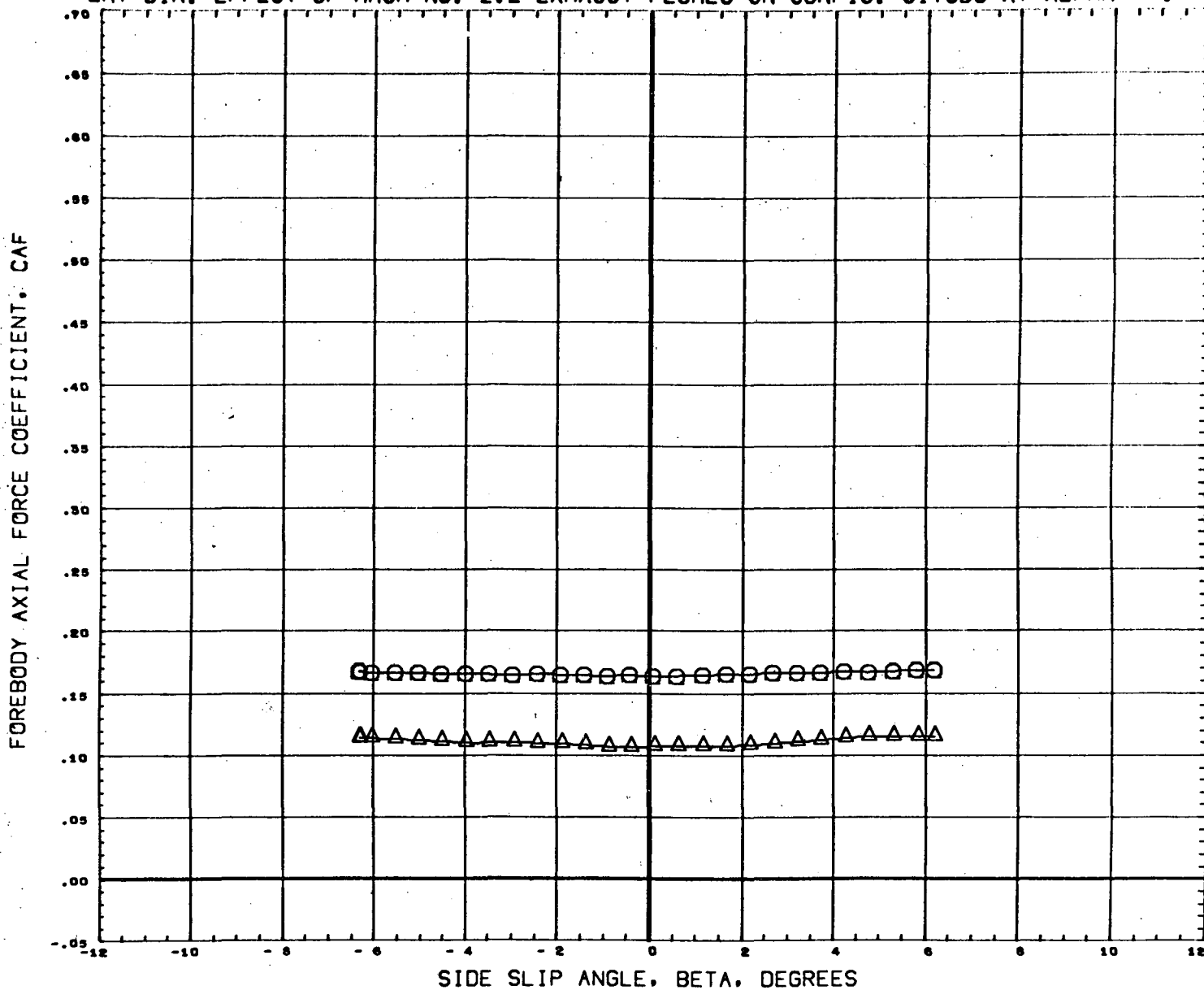


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7563)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	662.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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LAT-DIR. EFFECT OF MACH NO.=2.2 EXHAUST PLUMES ON CONFIG. 01T3B6 AT ALPHA = 0

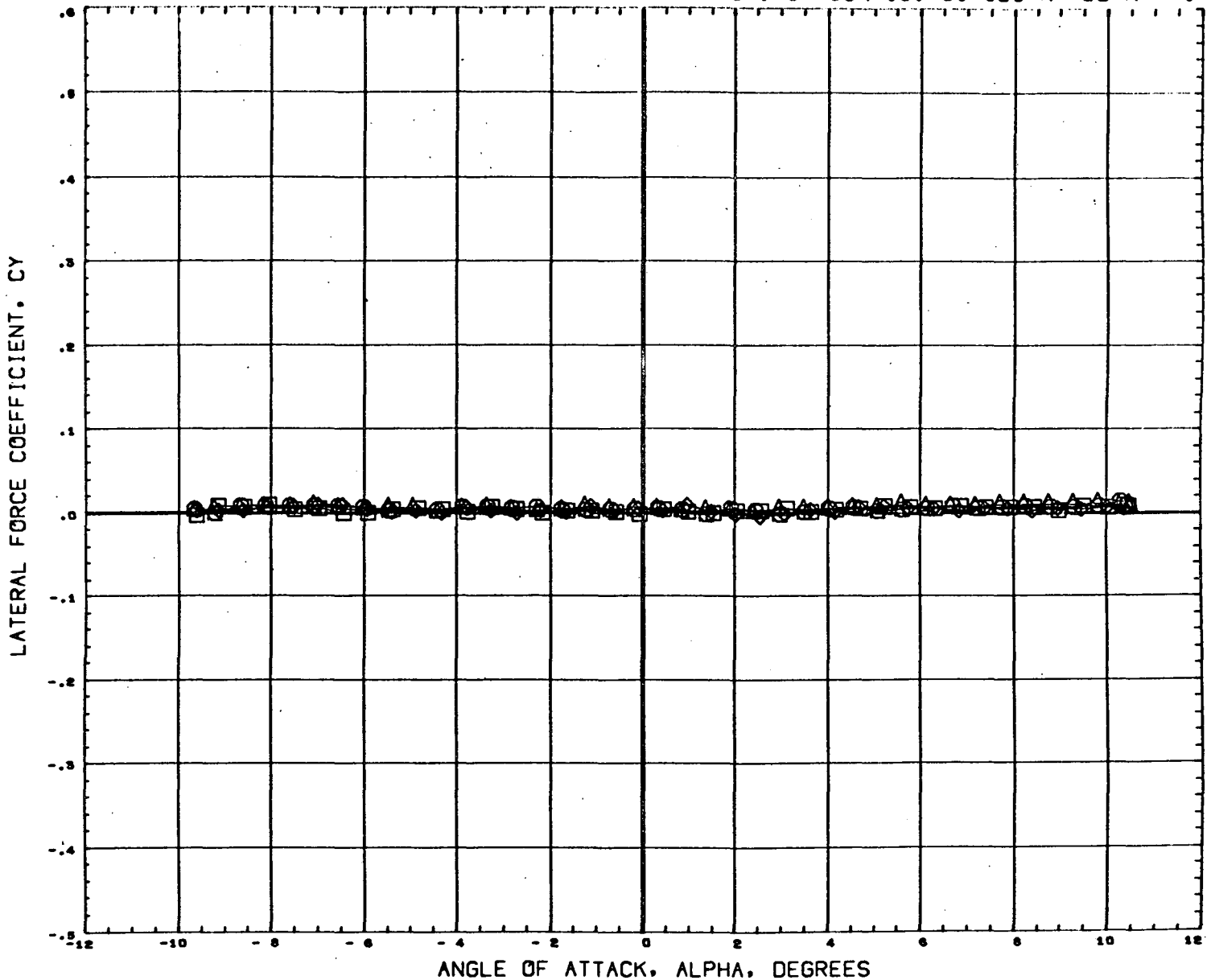


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7563)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T3B6 AT BETA = 0



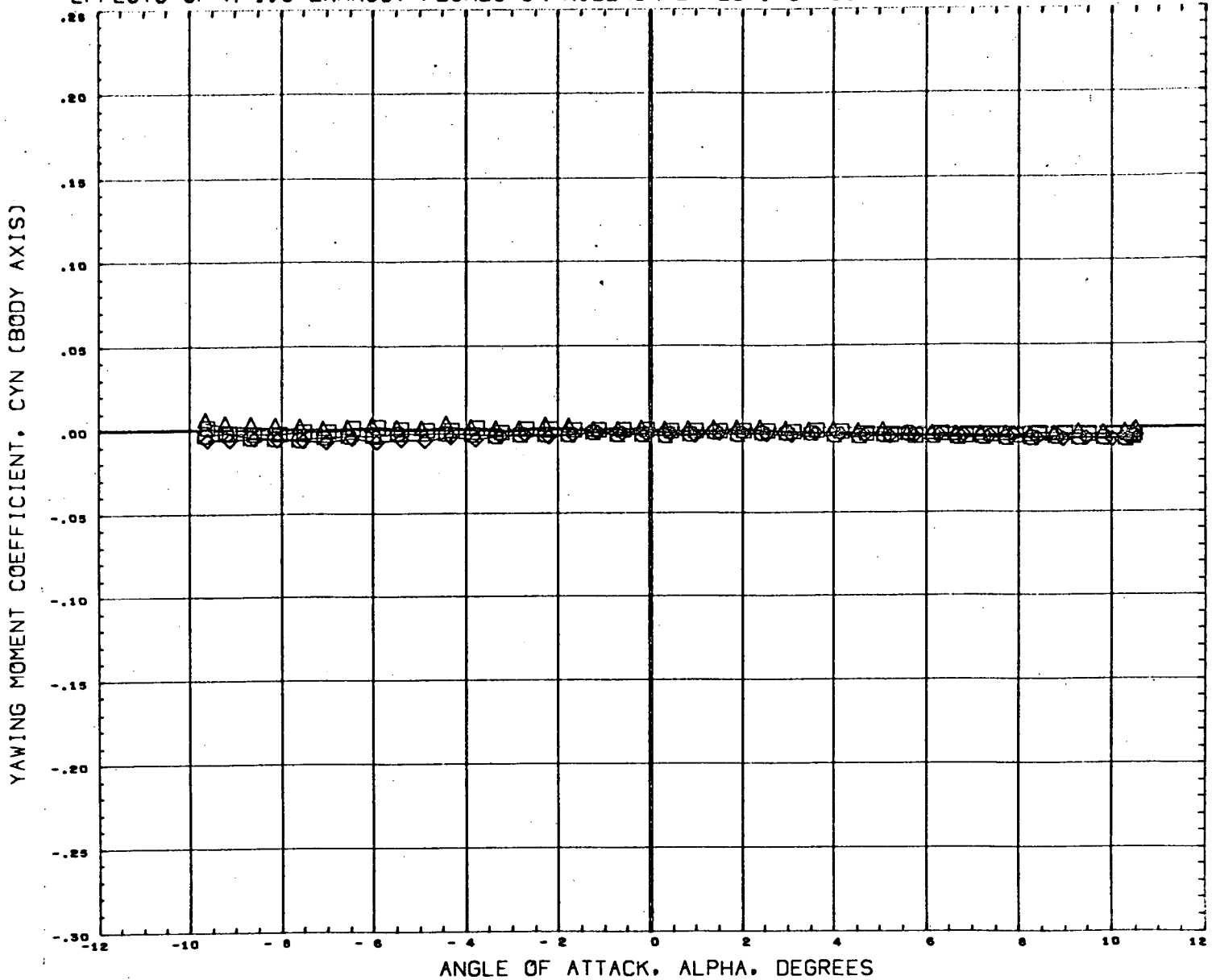
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(TD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7550)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	682.0004 IN.
(RD7558)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T3B6 AT BETA = 0

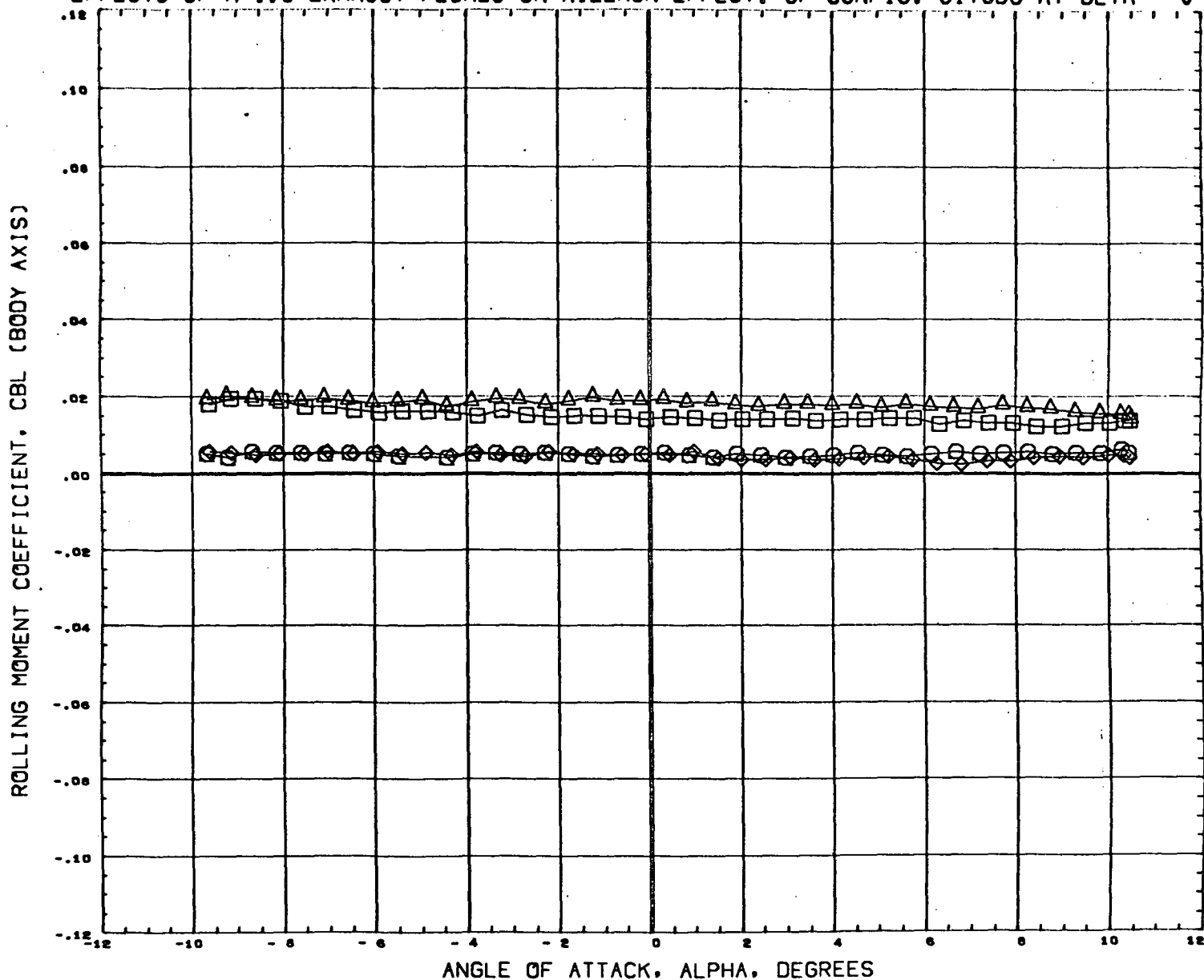


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(TD7548)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7550)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(RD7556)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004	IN.
(RD7558)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T3B6 AT BETA = 0

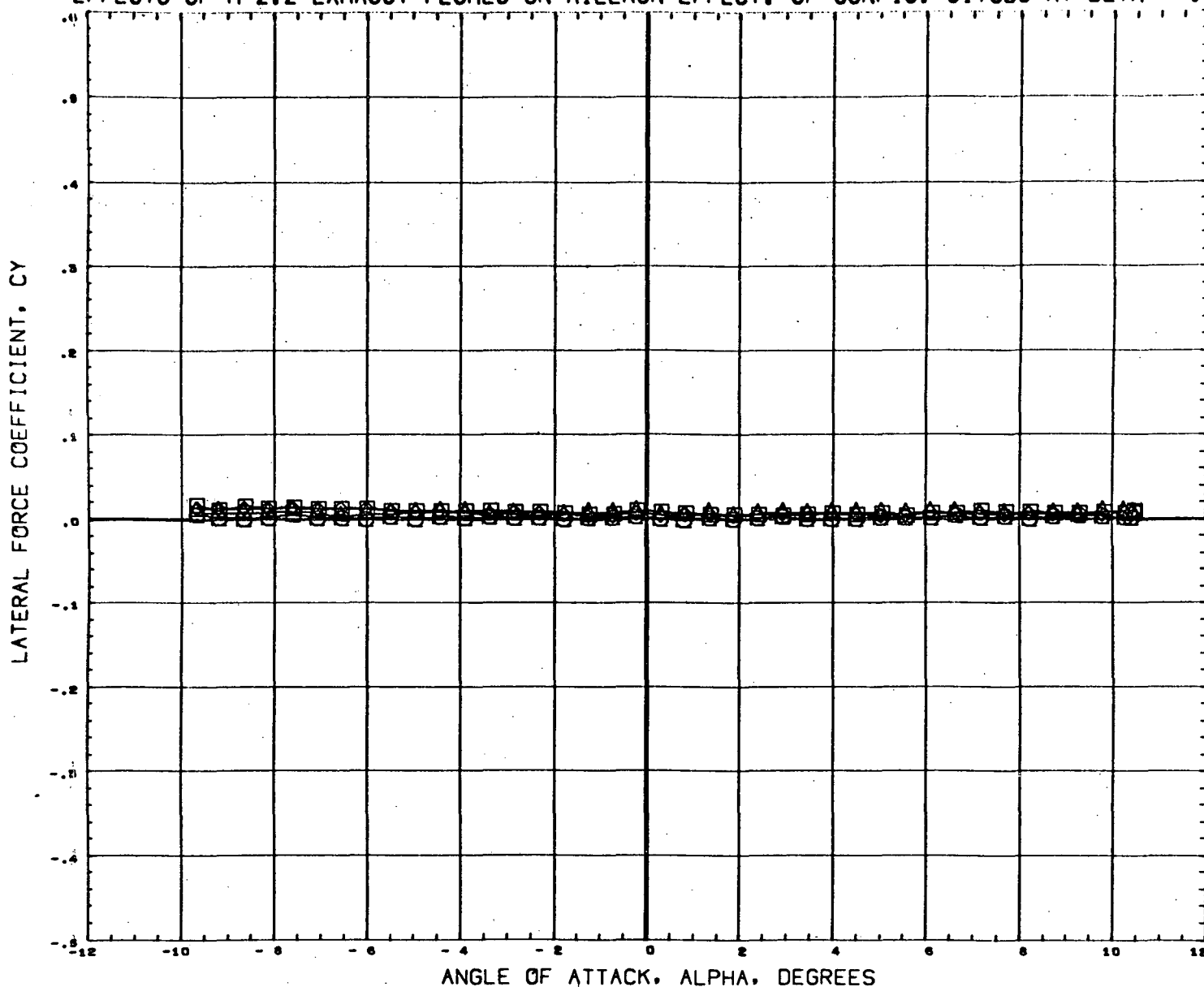


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(TD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7550)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7558)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T3B6 AT BETA = 0

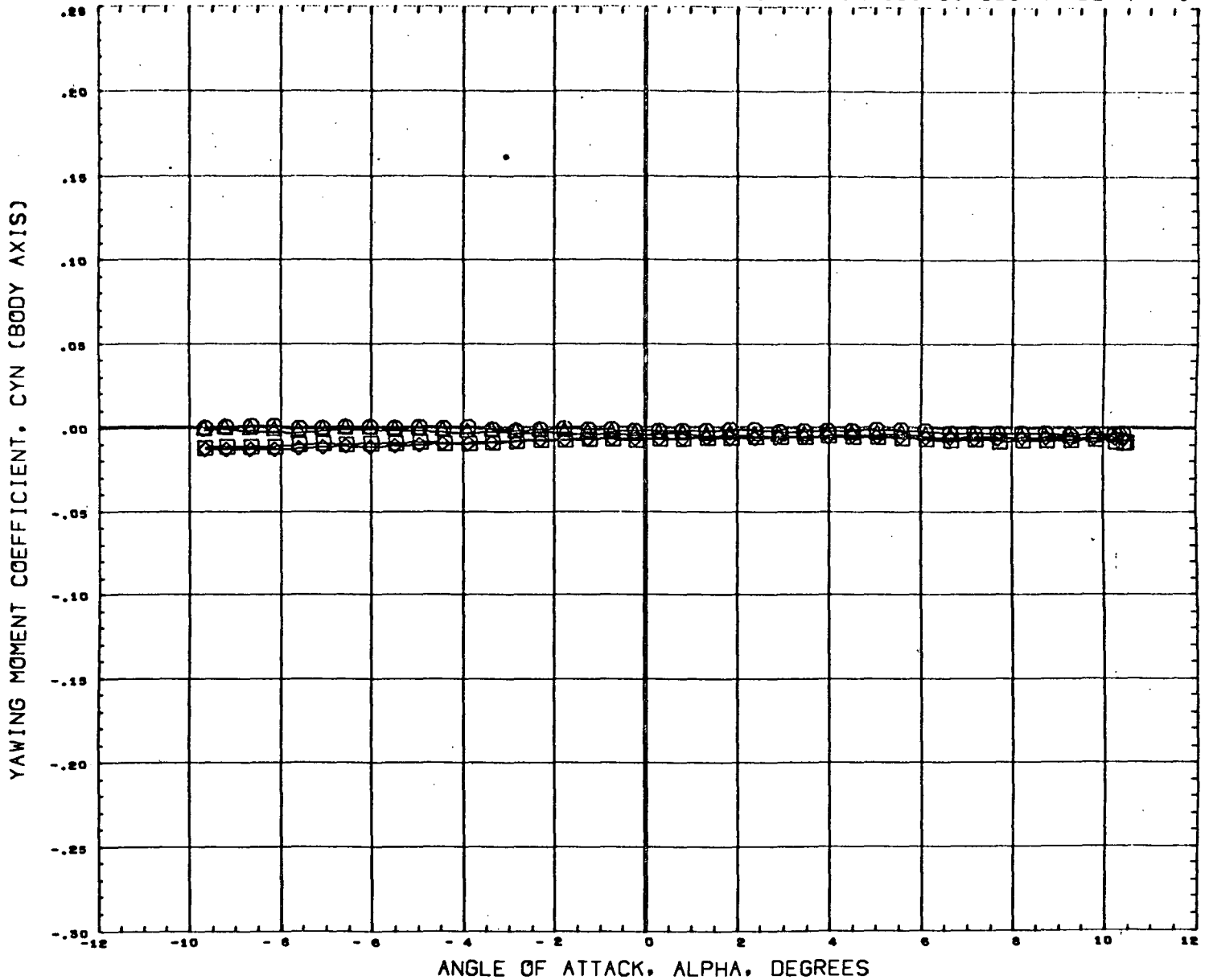


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(TD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(TD7550)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(TD7562)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7564)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T3B6 AT BETA = 0

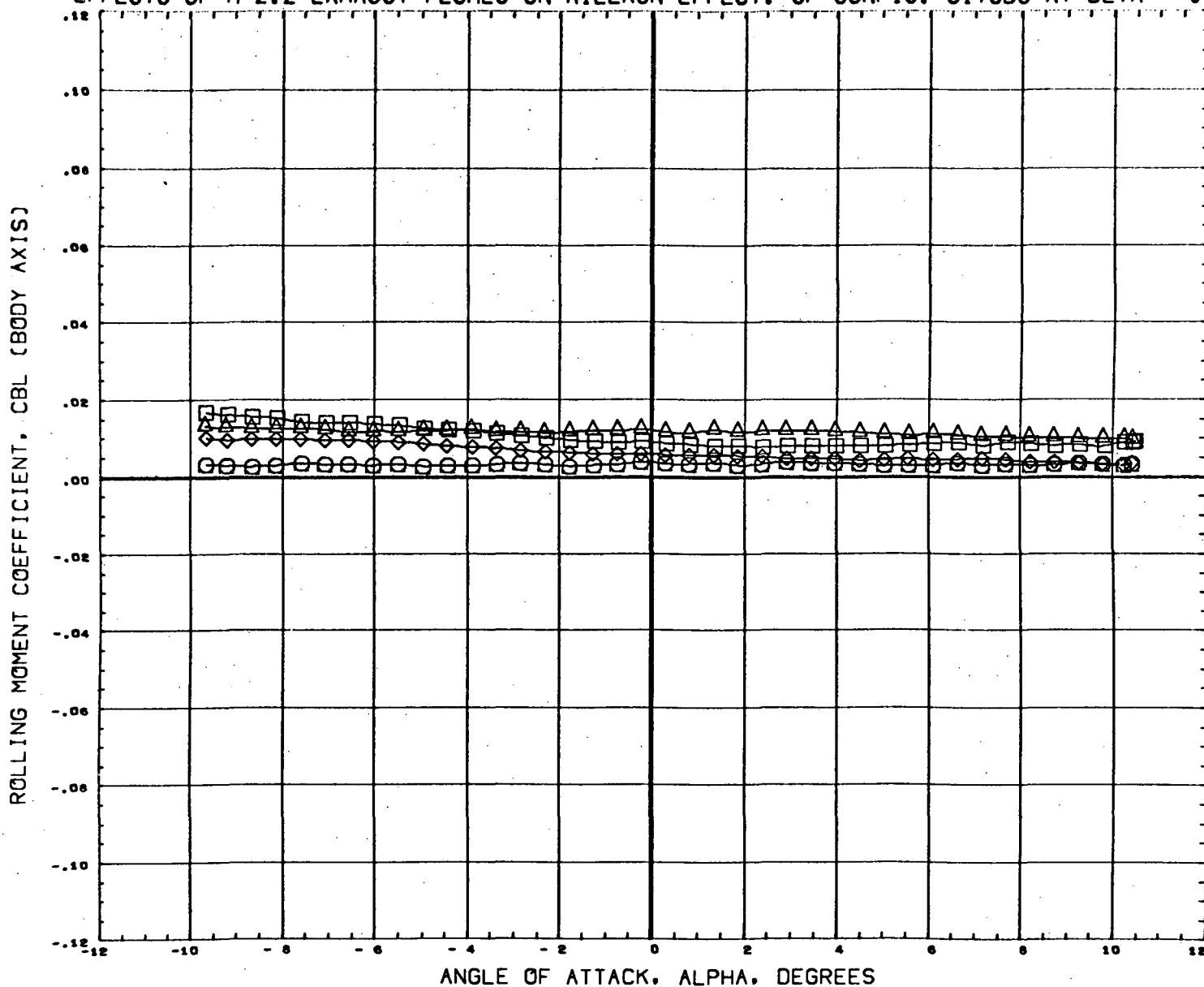


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(TD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(TD7550)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(TD7562)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	BREF	882.0004	IN.
(RD7564)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	20.000	0.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON AILERON EFFECT. OF CONFIG. 01T3B6 AT BETA = 0



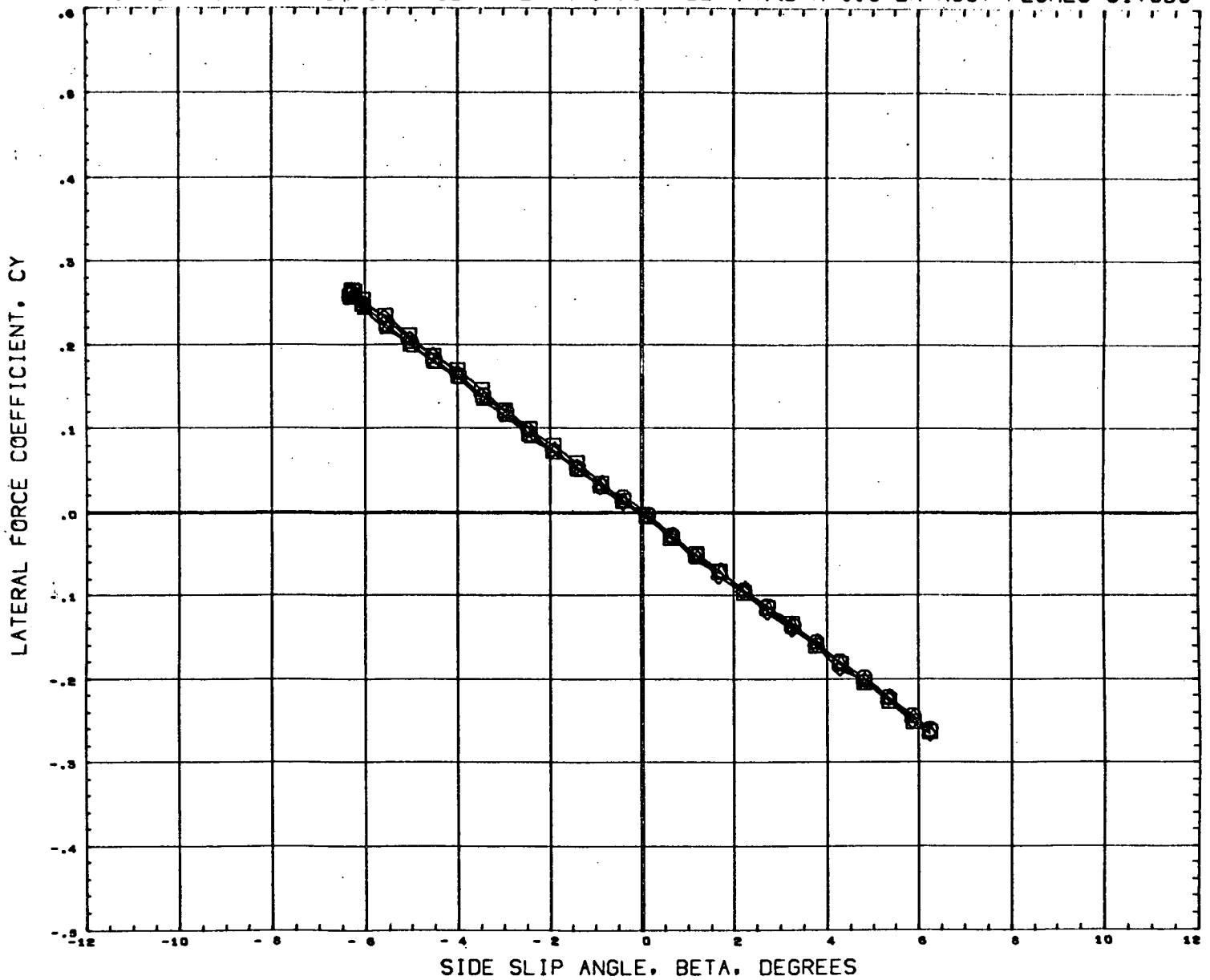
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(TD7548)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(TD7550)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	20.000	0.000	LREF	809.5004 IN.
(TD7562)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(PD7564)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (2.2)	0.000	0.000	20.000	0.000	YMRP	557.0004 IN.
						ZMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

2.20

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T3B6

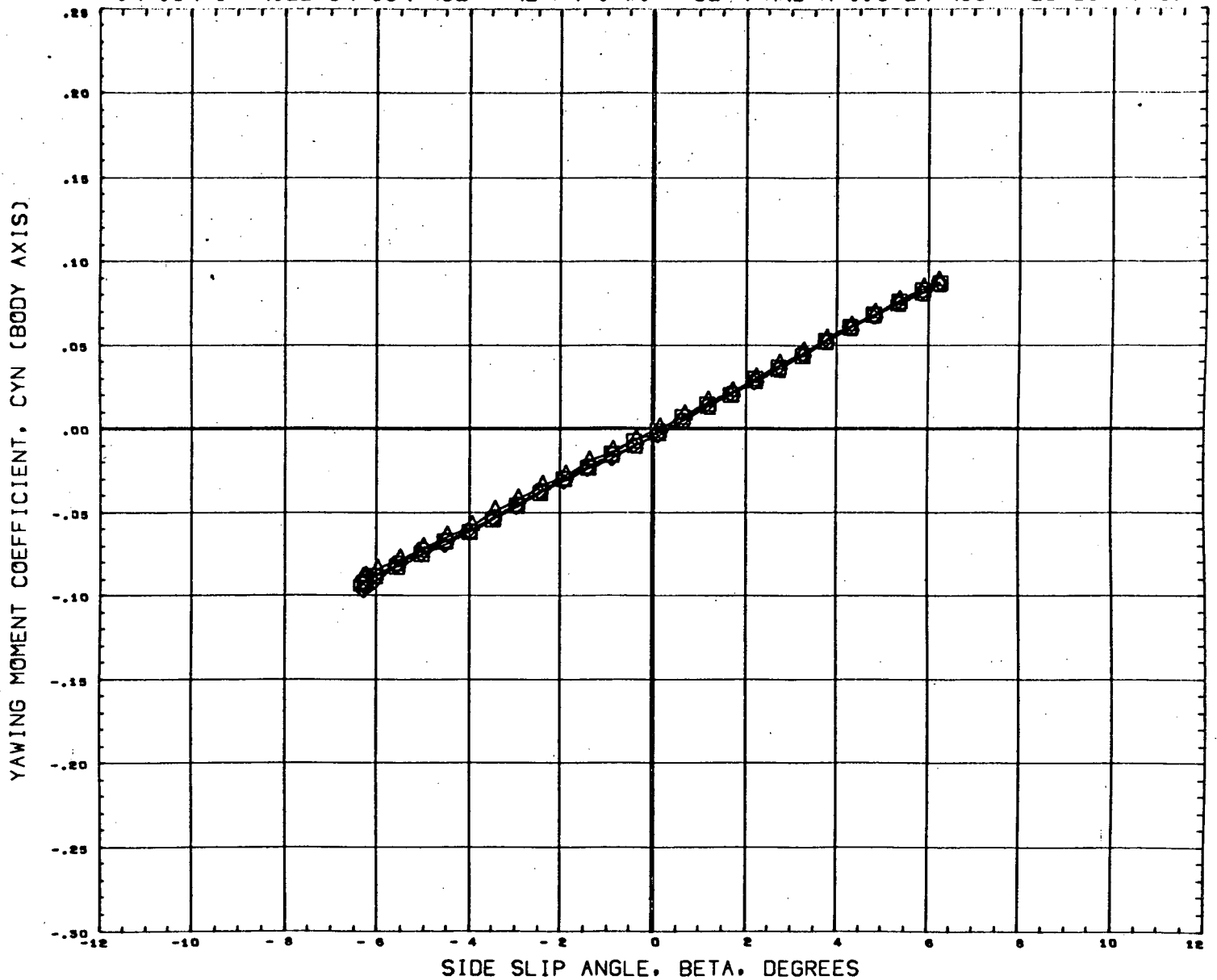


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7551)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7557)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7559)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T3B6

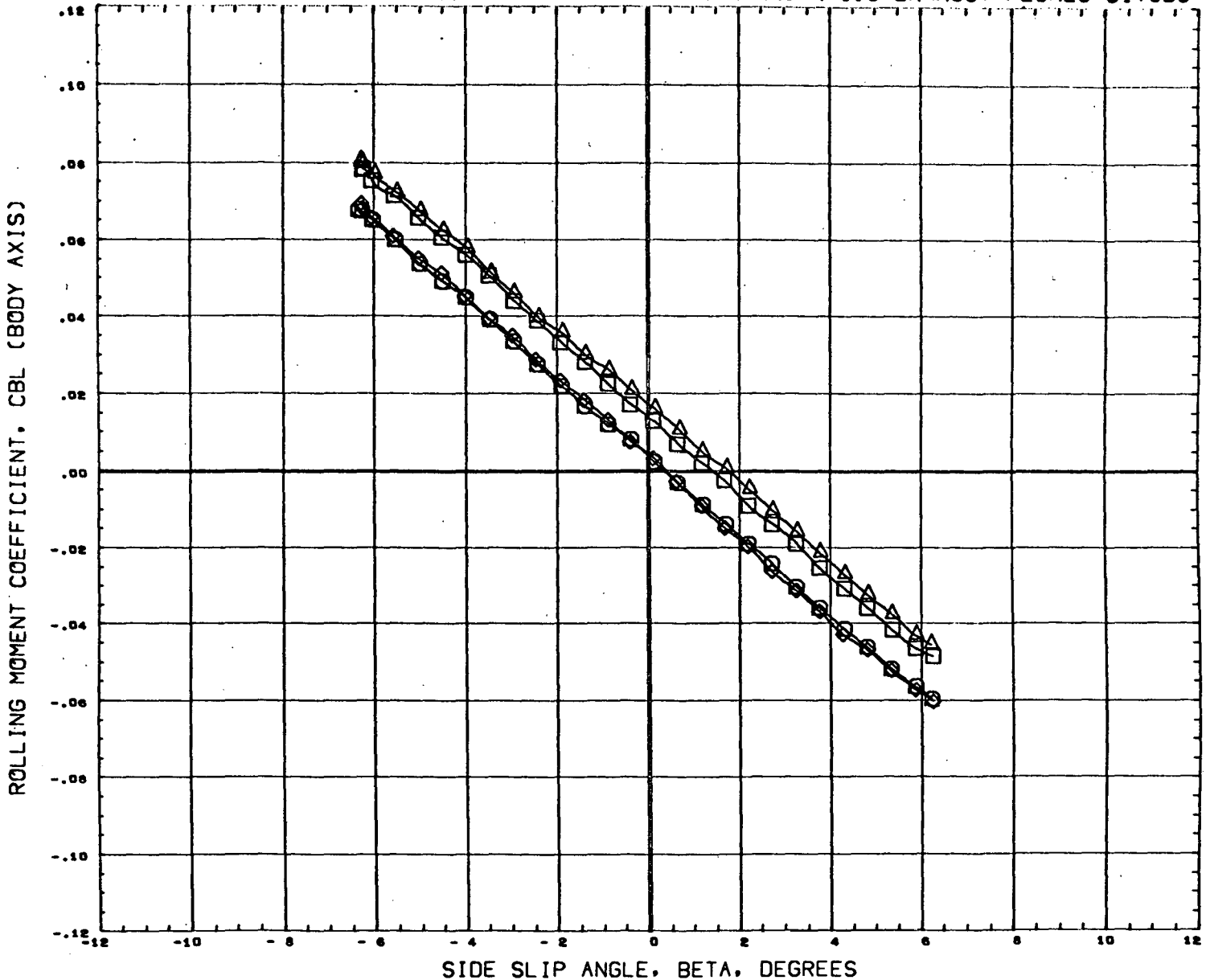


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7551)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7557)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7559)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T3B6



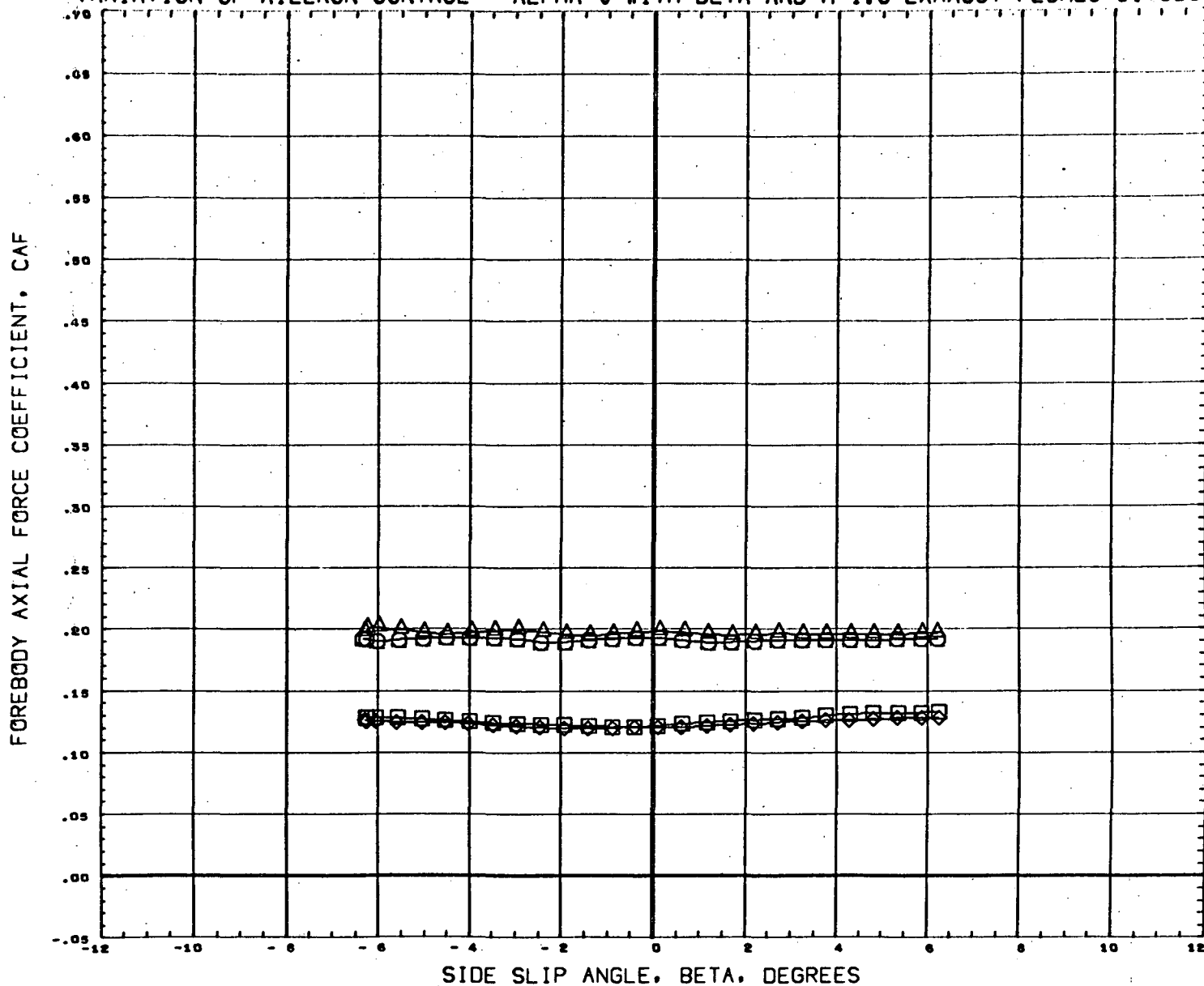
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7551)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7557)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7559)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=1.5 EXHAUST PLUMES 01T3B6

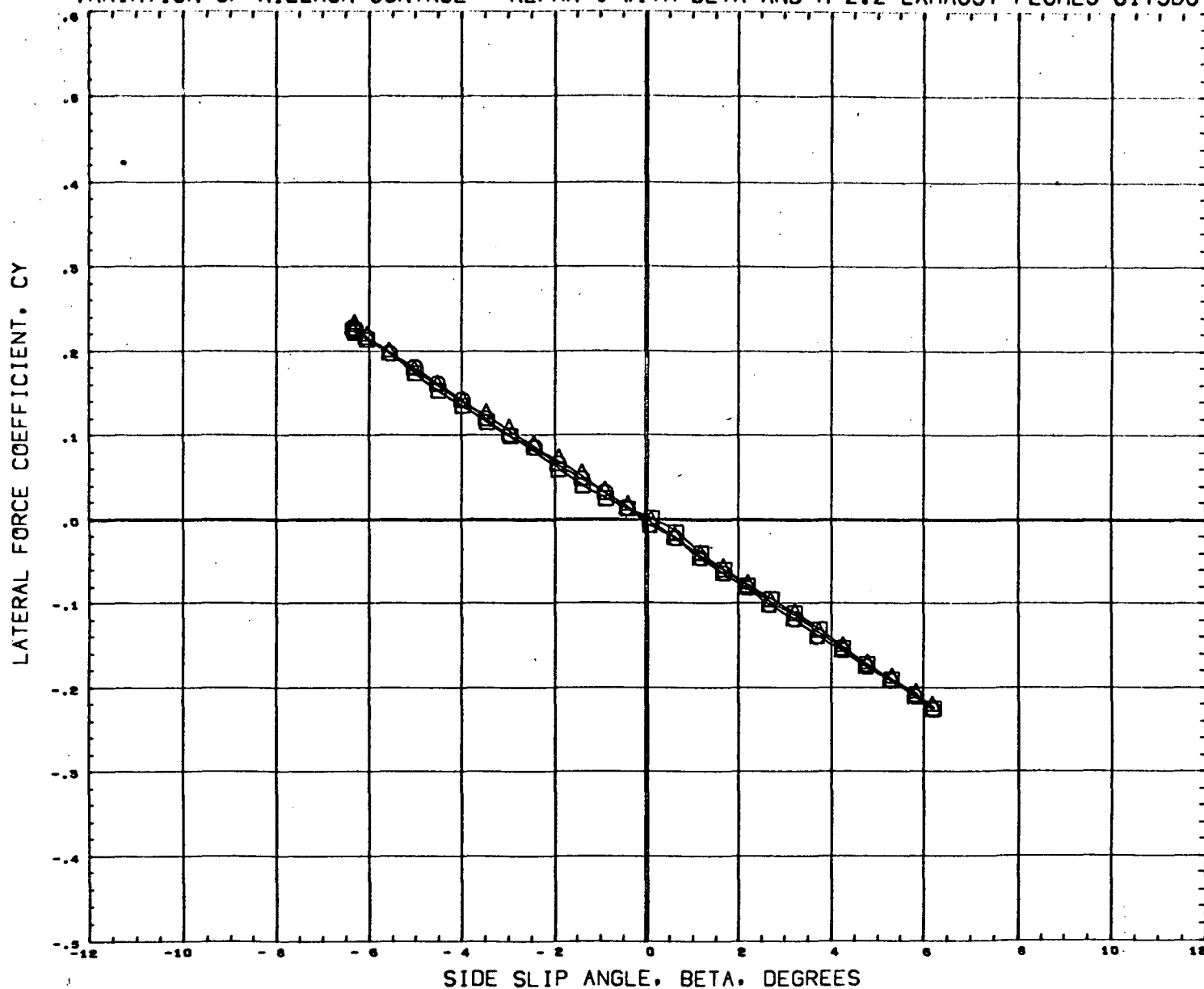


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7551)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7557)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(1.5)	0.000	0.000	0.000	0.000	BREF	682.0004 IN.
(RD7559)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(1.5)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=2.2 EXHAUST PLUMES 01T3B6

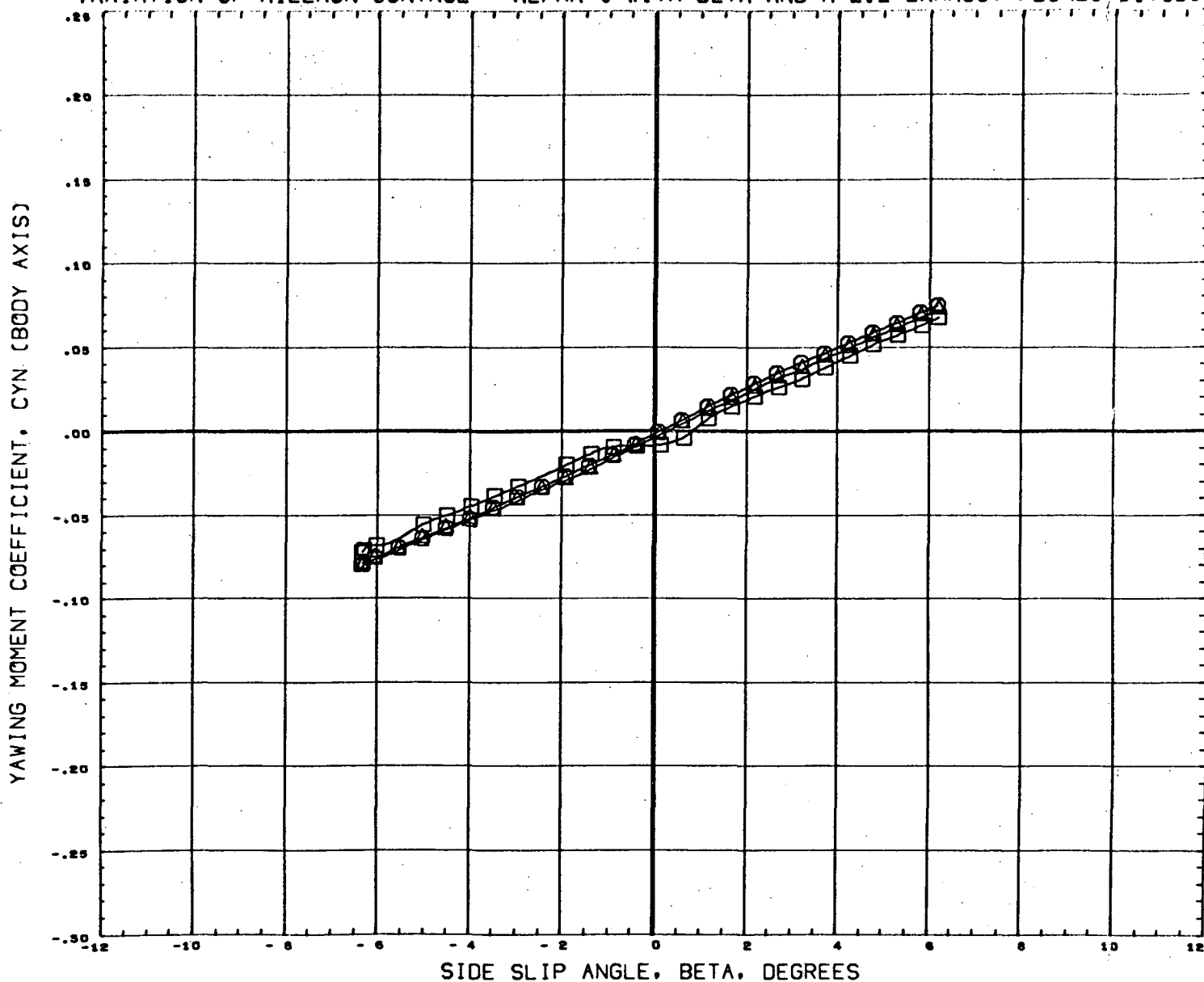


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(R07549)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.5040 SQ.FT.
(R07551)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(R07557)	DATA NOT AVAILABLE FOR ALL CONDITIONS	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(R07565)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(2.2)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=2.2 EXHAUST PLUMES 01T3B6

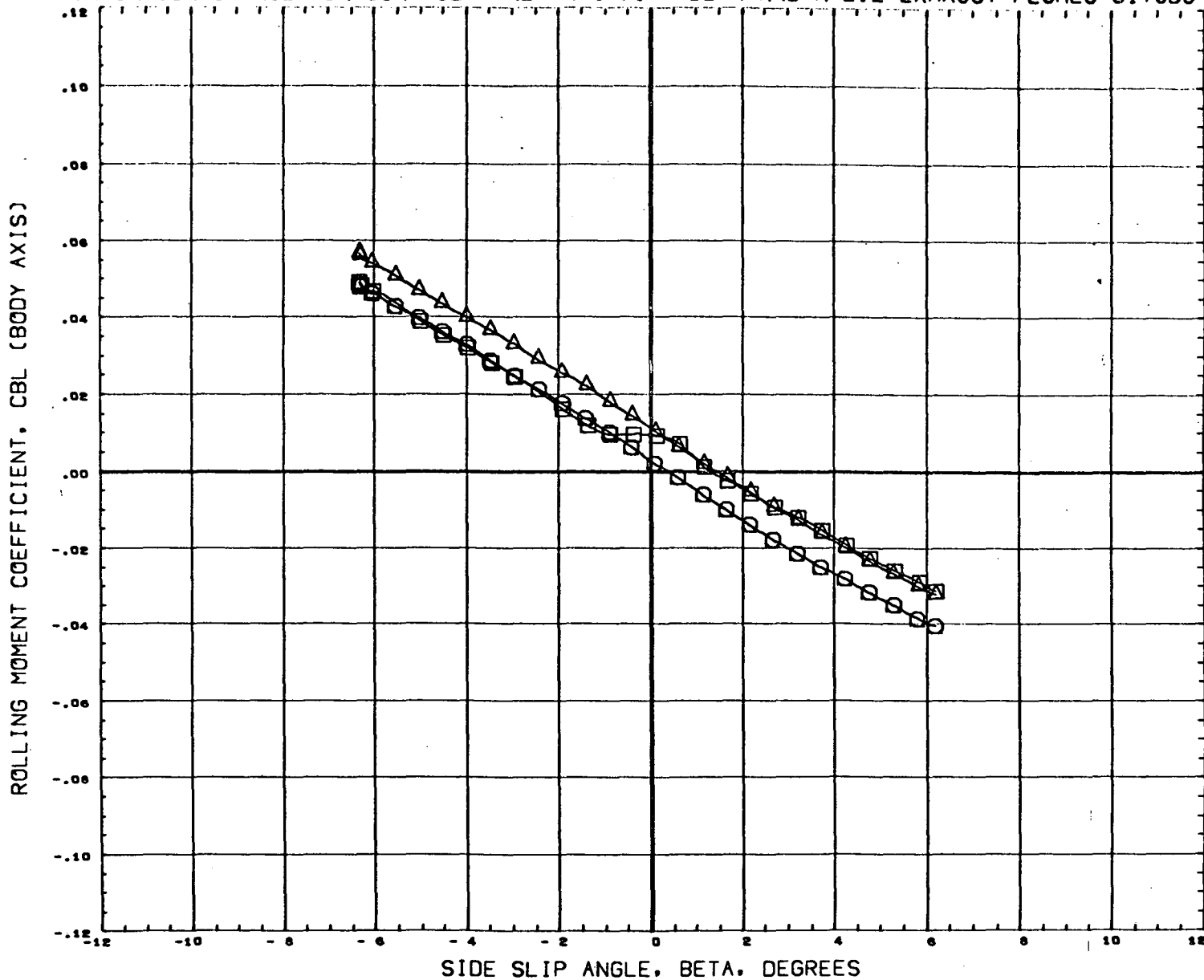


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7551)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7557)	DATA NOT AVAILABLE FOR ALL CONDITIONS	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7565)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=2.2 EXHAUST PLUMES 01T3B6

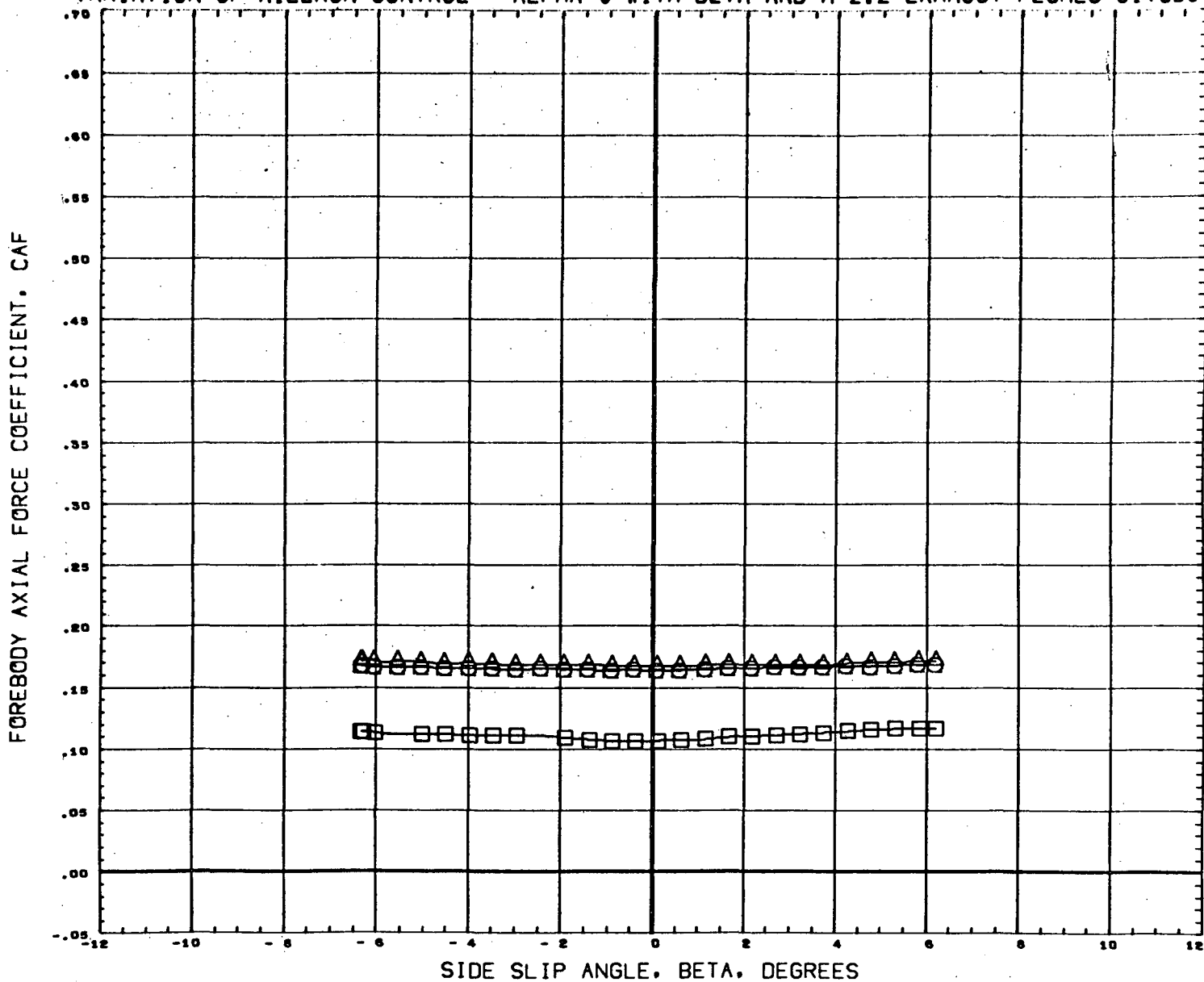


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7551)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7557)	DATA NOT AVAILABLE FOR ALL CONDITIONS	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7565)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF AILERON CONTROL ALPHA=0 WITH BETA AND M=2.2 EXHAUST PLUMES 01T3B6

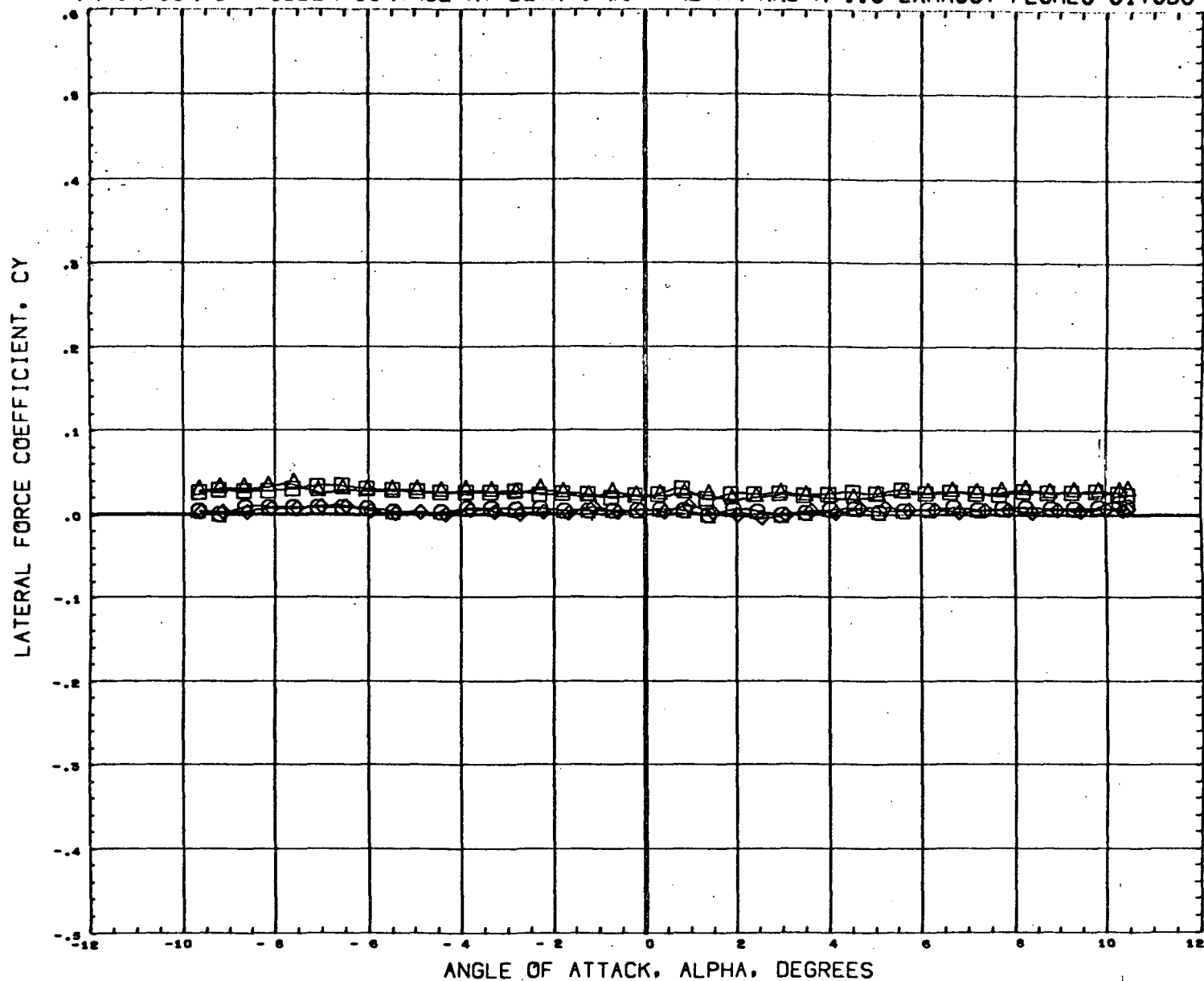


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7551)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7557)	DATA NOT AVAILABLE FOR ALL CONDITIONS	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7565)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(2.2)	0.000	0.000	20.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T3B6

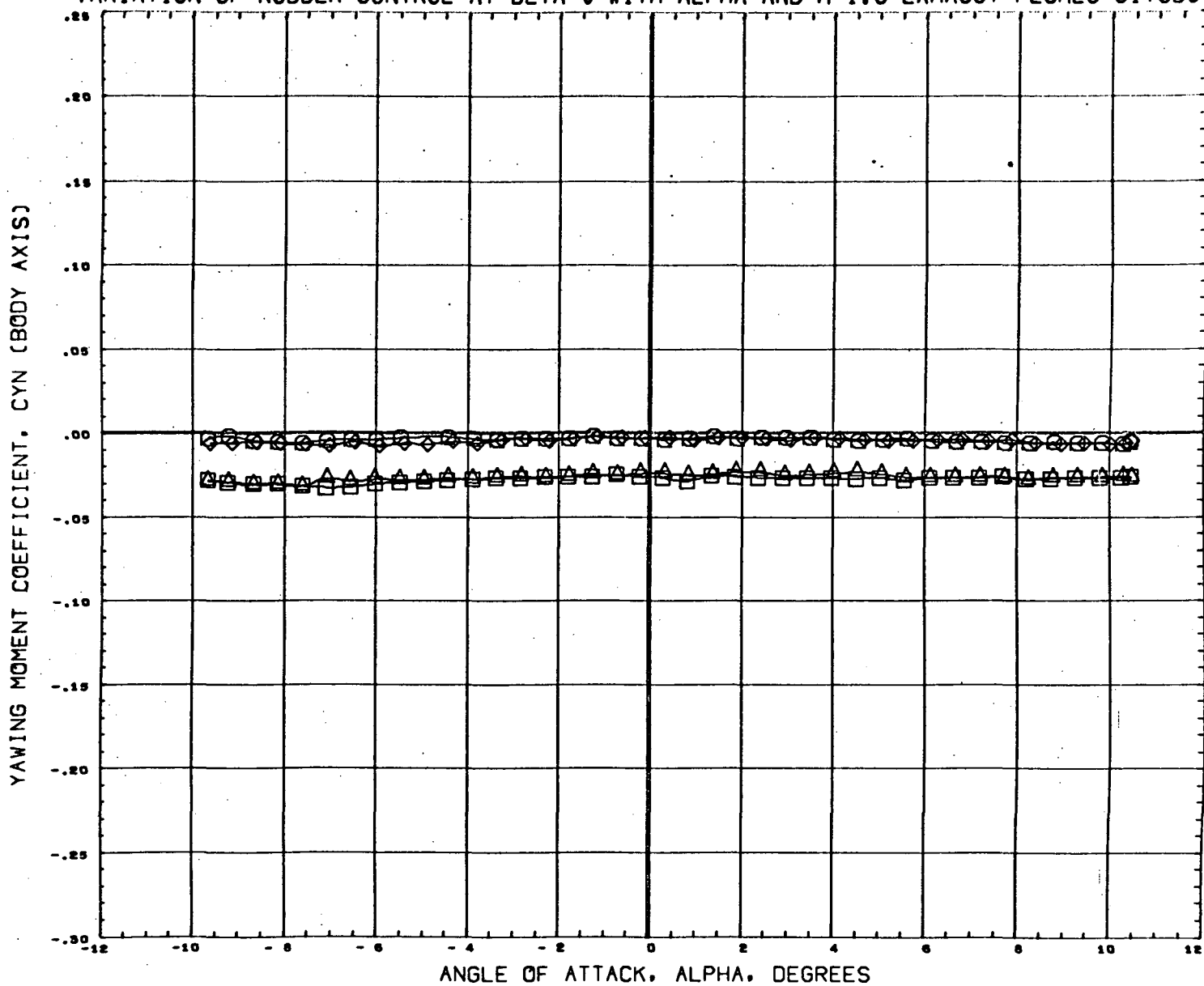


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(TD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3153.3040	SQ.FT.
(TD7552)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.3004	IN.
(RD7536)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004	IN.
(TD7560)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T3B6

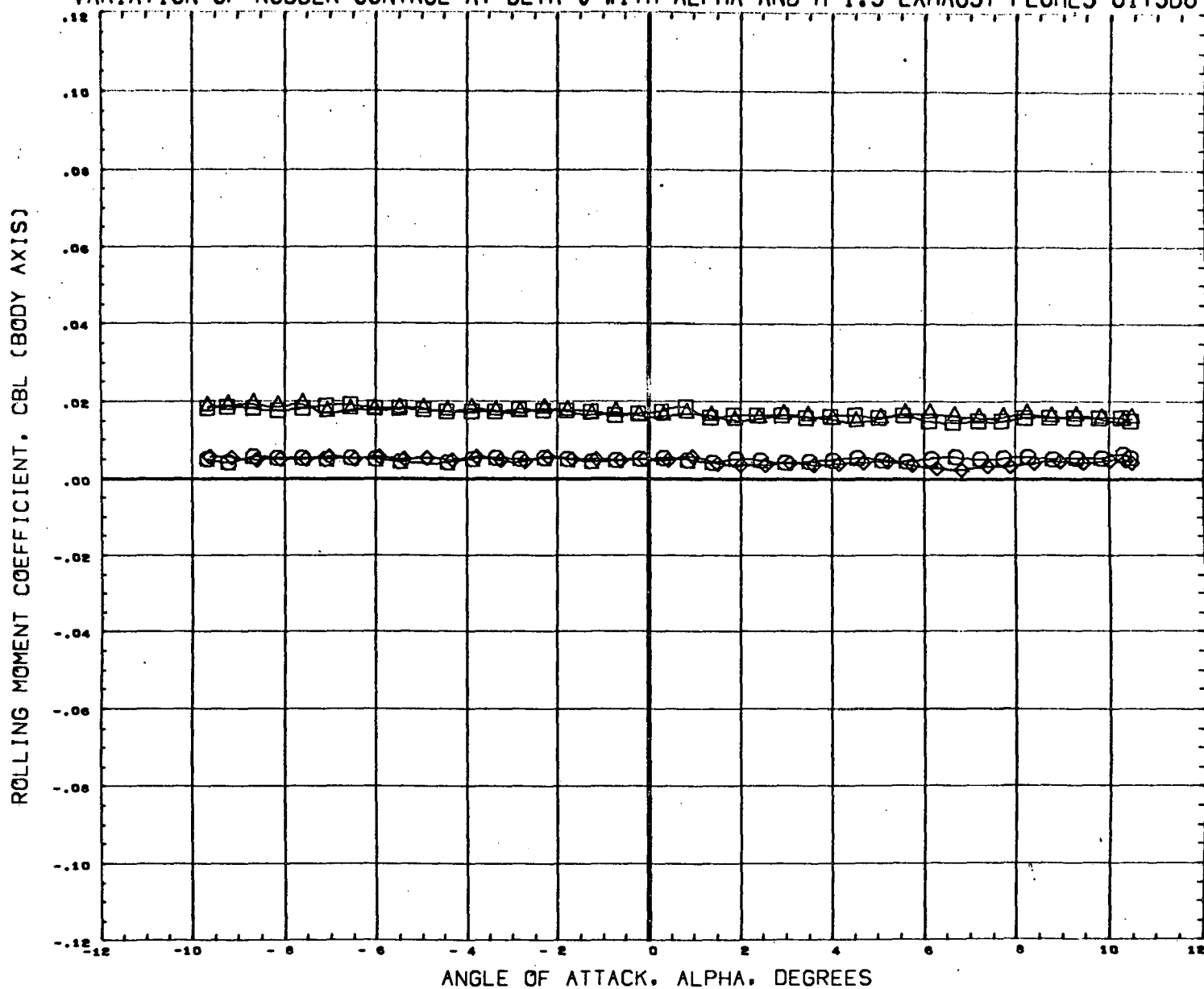


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(TD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(TD7552)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.3004 IN.
(RD7556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	662.0004 IN.
(TD7560)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	937.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=1.5 EXHAUST PLUMES 01T3B6



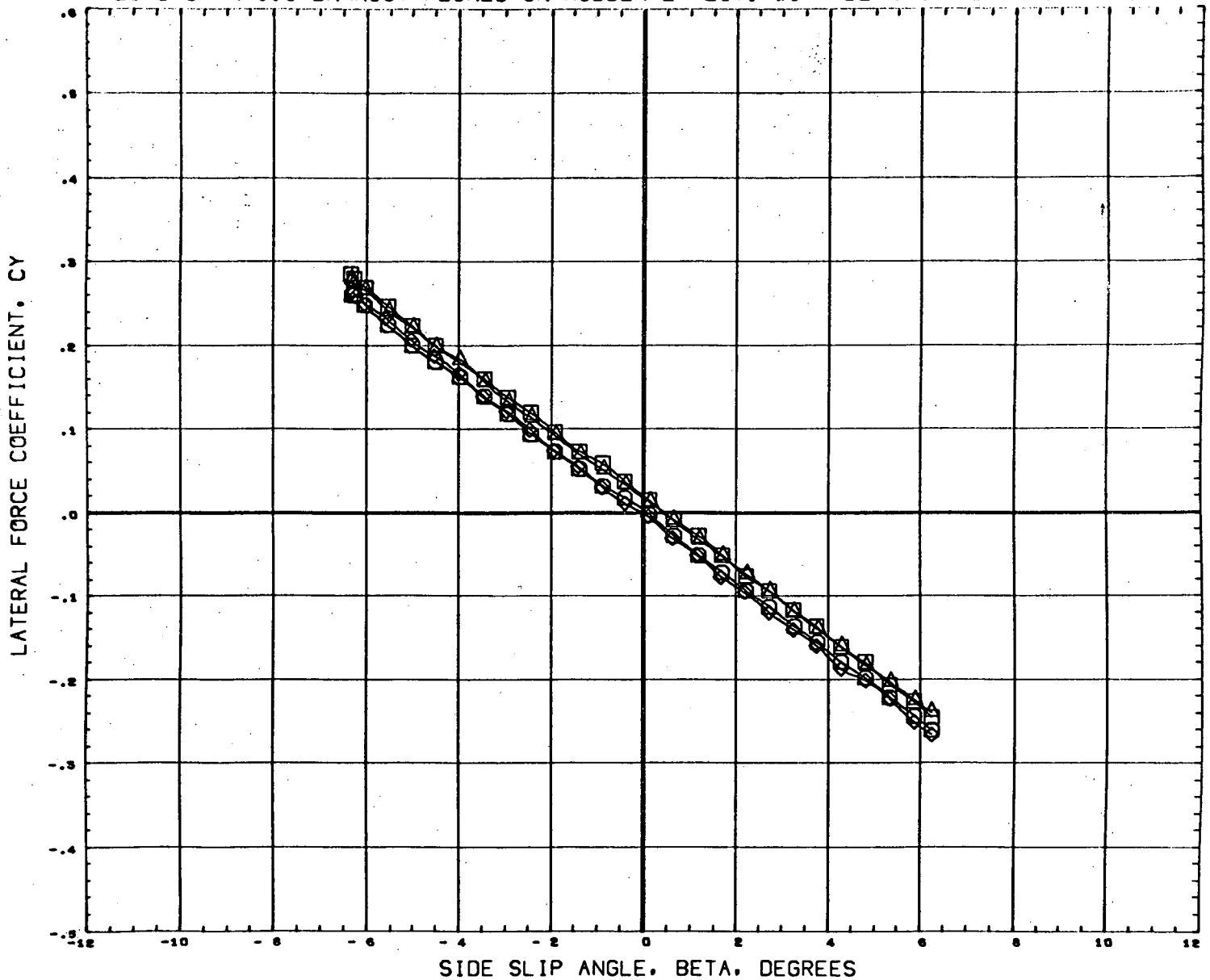
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(TD7548)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ. FT.
(TD7552)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(RD7556)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004	IN.
(TD7560)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T3B6

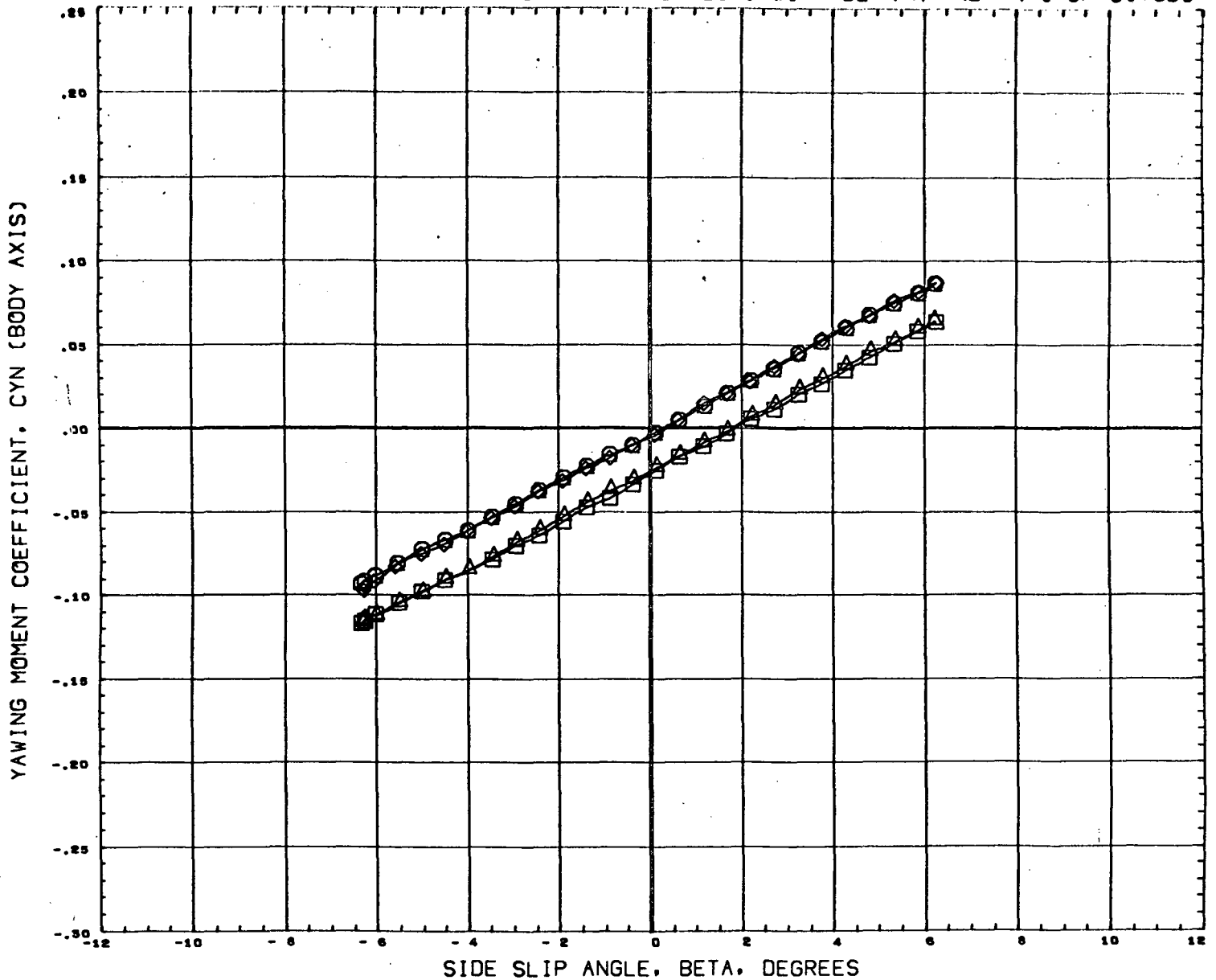


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7553)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7557)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7561)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T3B6

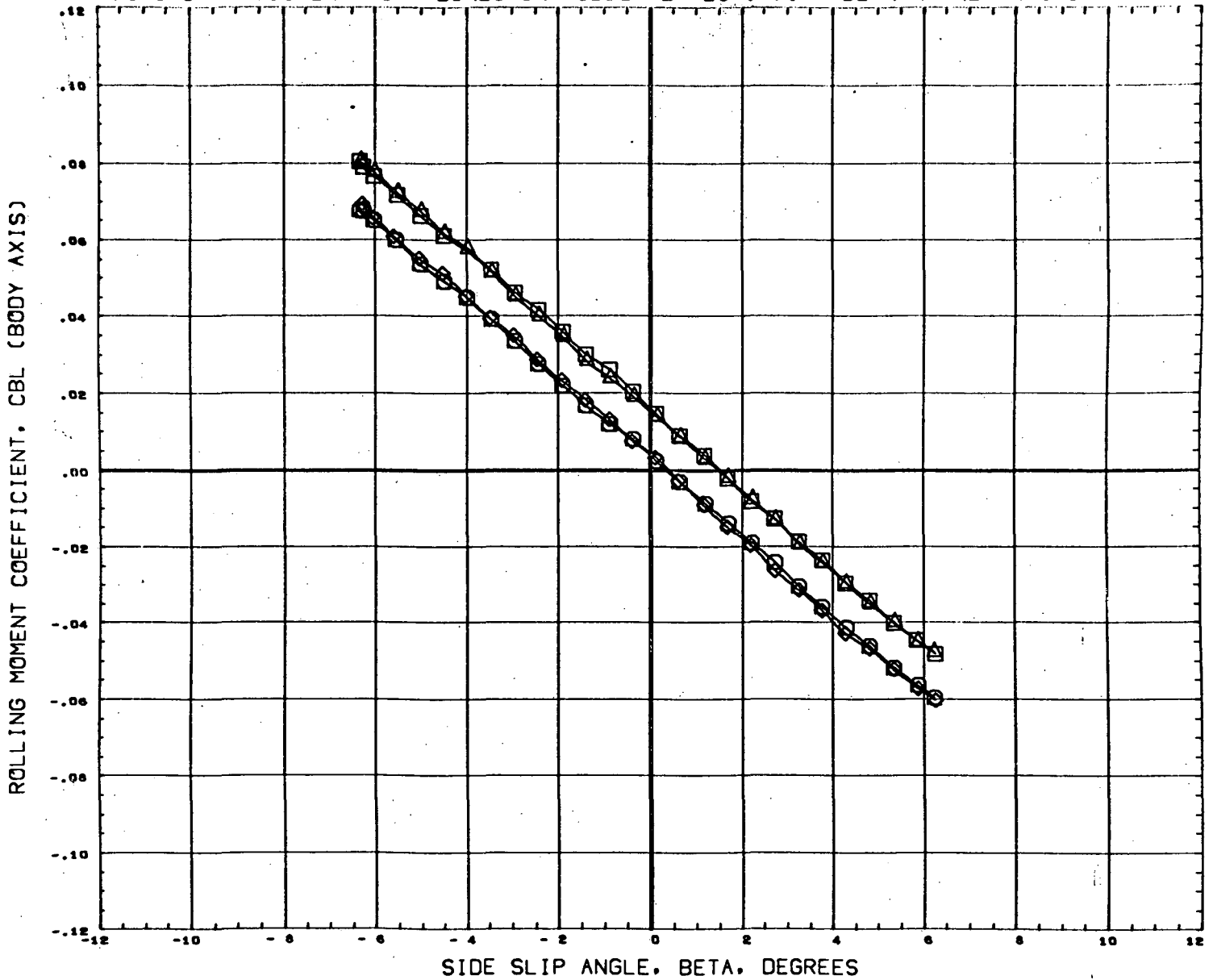


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-C6) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7553)	MDAC S-222 COMPOSITE (T-C6) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7557)	MDAC S-222 COMPOSITE (T-C6) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	682.0004 IN.
(RD7561)	MDAC S-222 COMPOSITE (T-C6) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0080

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T3B6

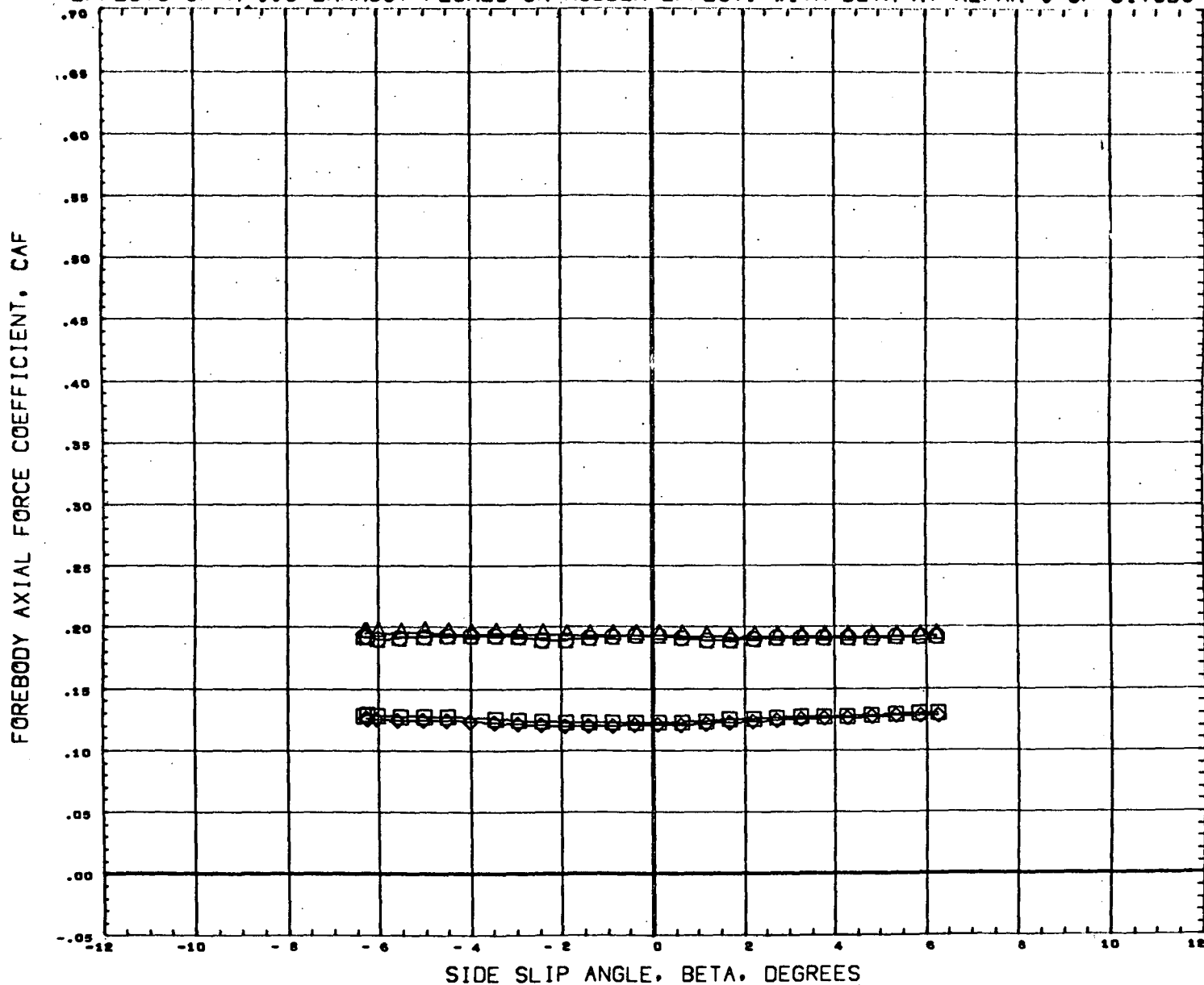


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(R07549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(R07553)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(R07557)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	SREF	882.0004 IN.
(R07561)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT, WITH BETA AT ALPHA=0 OF 01T3B6



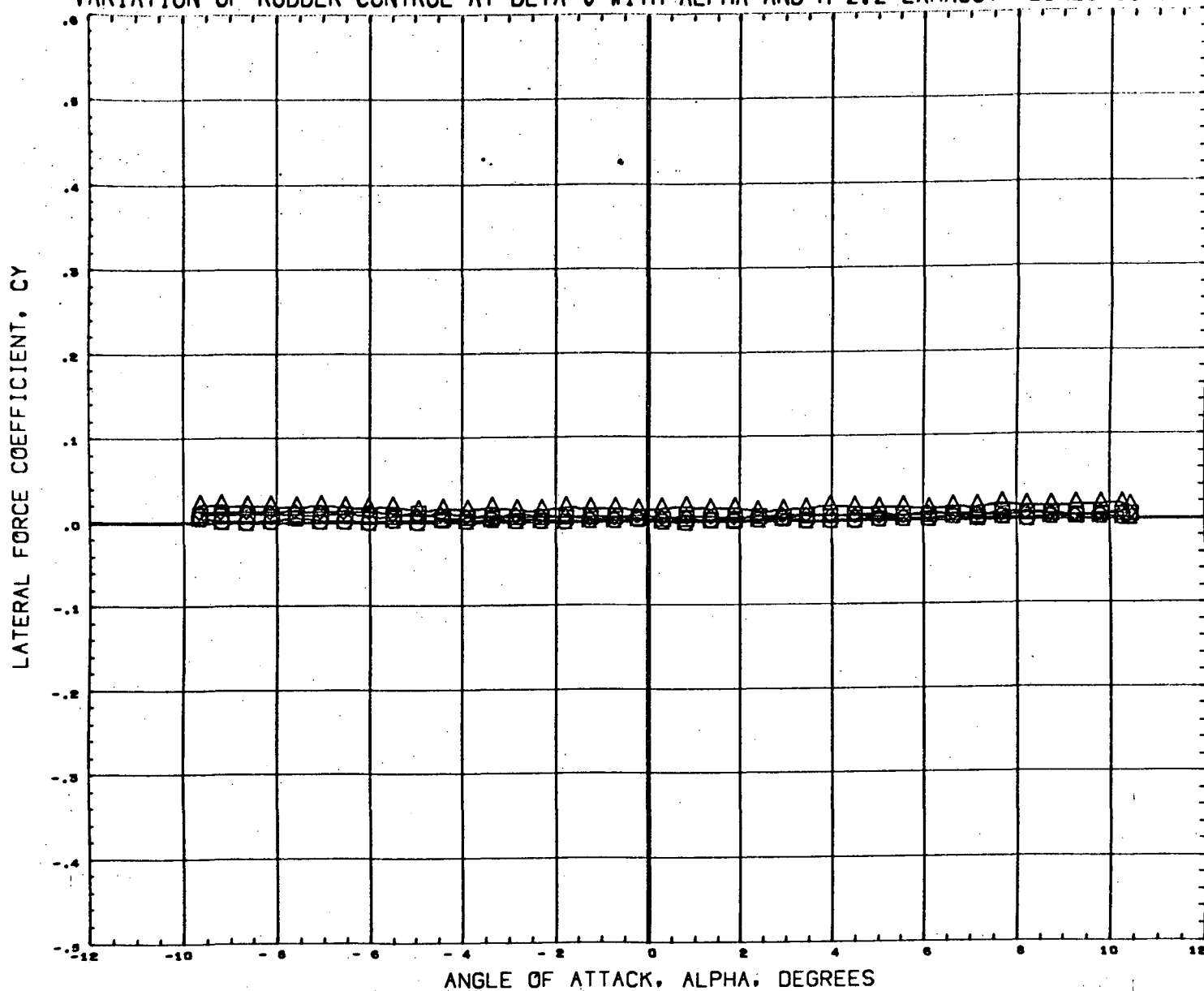
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ. FT.
(RD7553)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(RD7557)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	0.000	BREF	862.0004	IN.
(RD7561)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (1.5)	0.000	0.000	0.000	10.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH

1.51

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=2.2 EXHAUST PLUMES 01T3B6

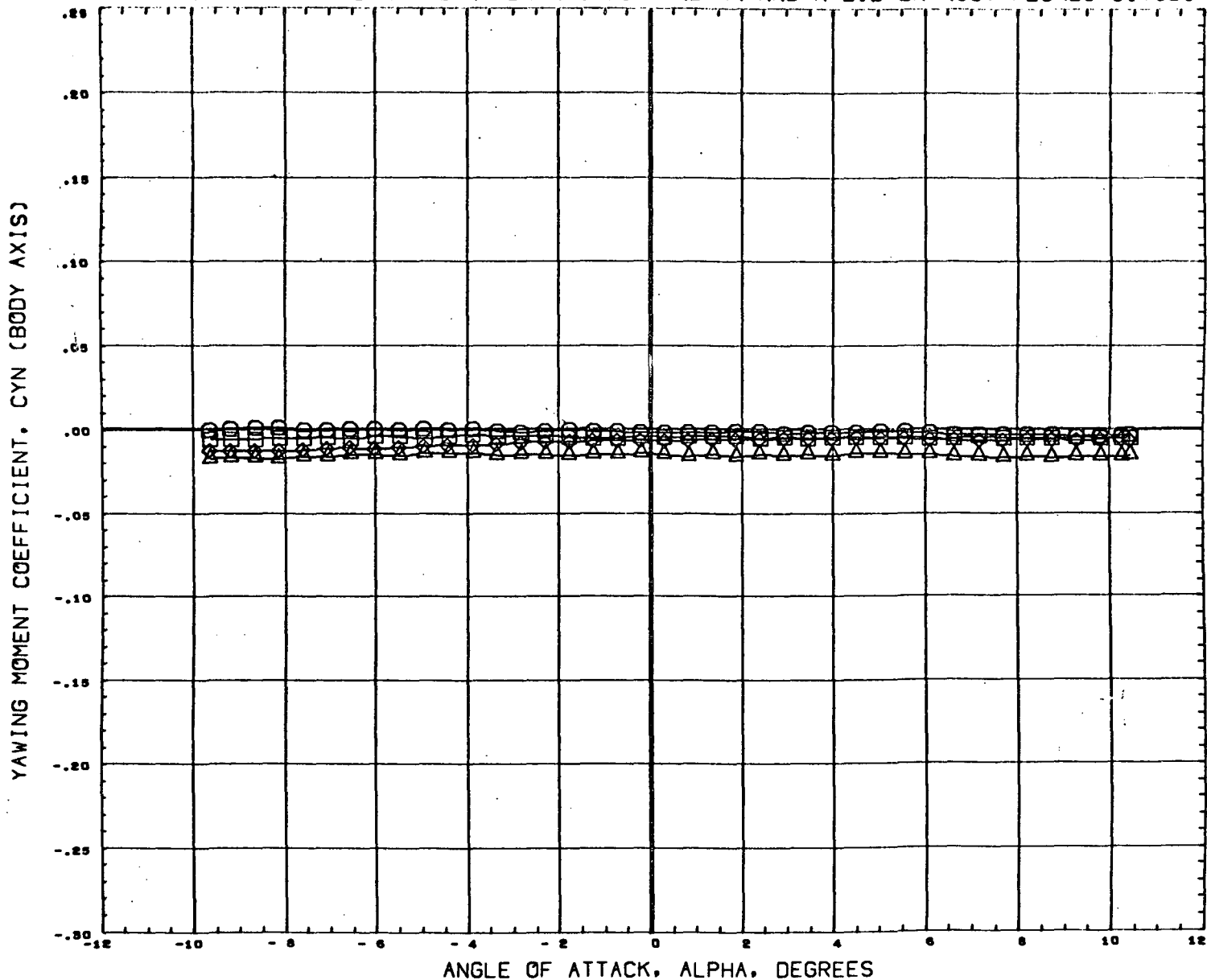


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(TD7548)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(TD7552)	MDAC S-222 COMPOSITE(T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(TD7562)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	882.0004 IN.
(TD7566)	MDAC S-222 COMPOSITE(T-CG) 01T3B6+PLUME(2.2)	0.000	0.000	0.000	10.000	XHRP	557.0004 IN.
						YHRP	0.0000 IN.
						ZHRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=2.2 EXHAUST PLUMES 01T3B6

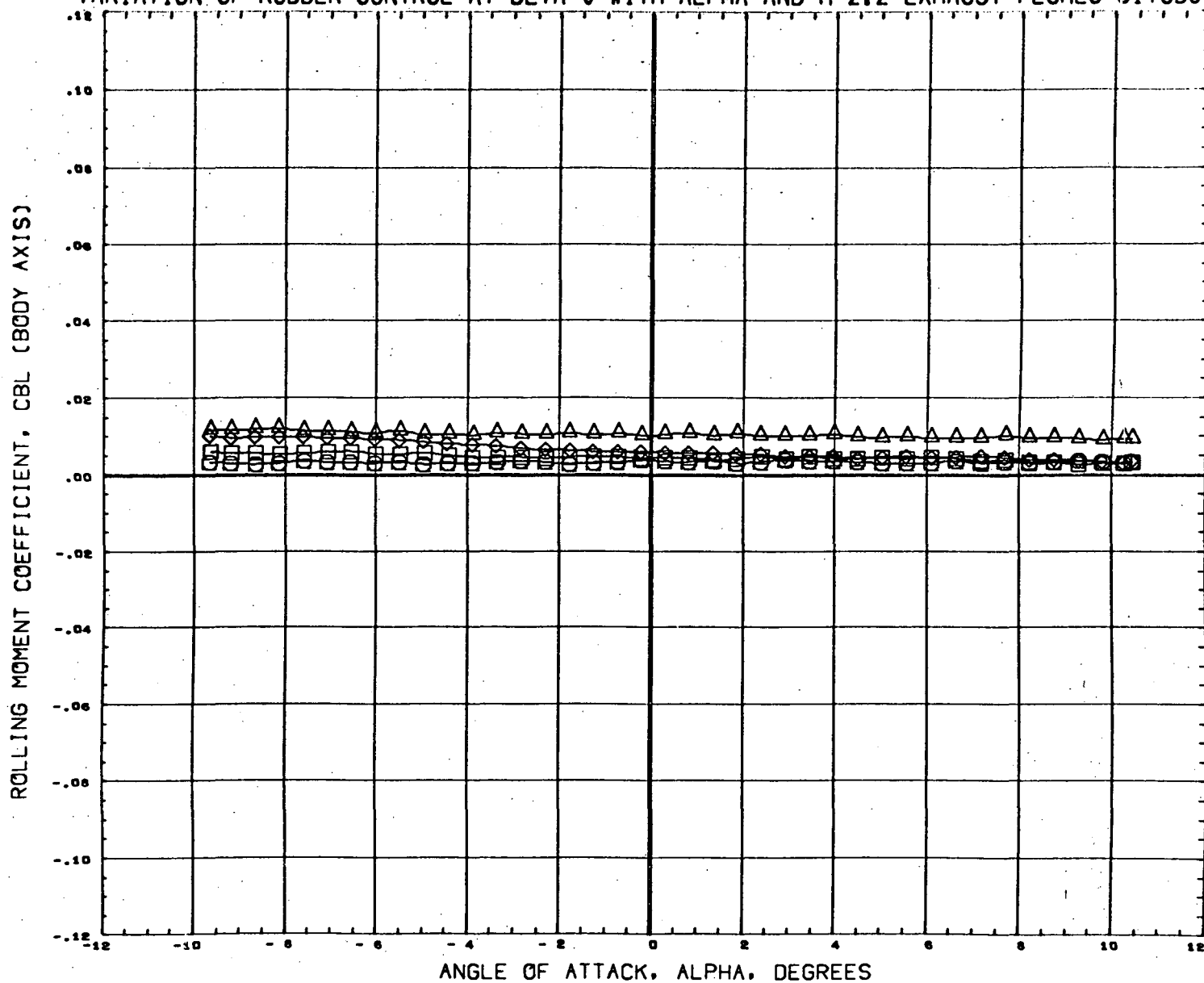


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(TD7548)	○	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(TD7552)	△	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(TD7562)	◇	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	BREF	862.0004 IN.
(TD7566)	□	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	10.000	XMPP	557.0004 IN.
							YMPP	0.0000 IN.
							ZMPP	200.0004 IN.
							SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL AT BETA=0 WITH ALPHA AND M=2.2 EXHAUST PLUMES 01T3B6

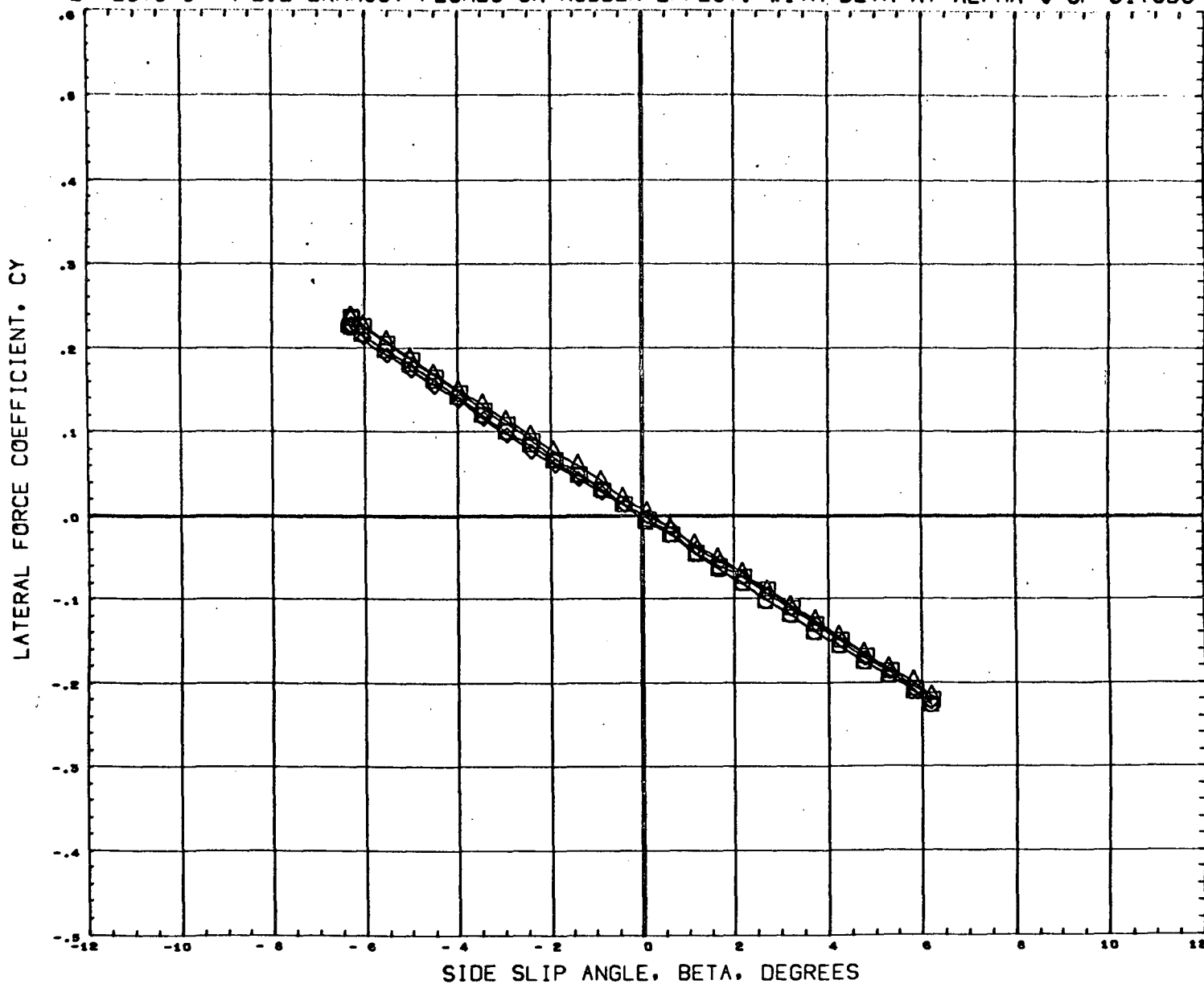


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	ATLRON	RUDDER	REFERENCE INFORMATION	
(TD7546)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(TD7552)	MDAC S-222 COMPOSITE (T-CG) O1T3B6	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(TD7562)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(TD7566)	MDAC S-222 COMPOSITE (T-CG) O1T3B6+PLUME (2.2)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T3B6



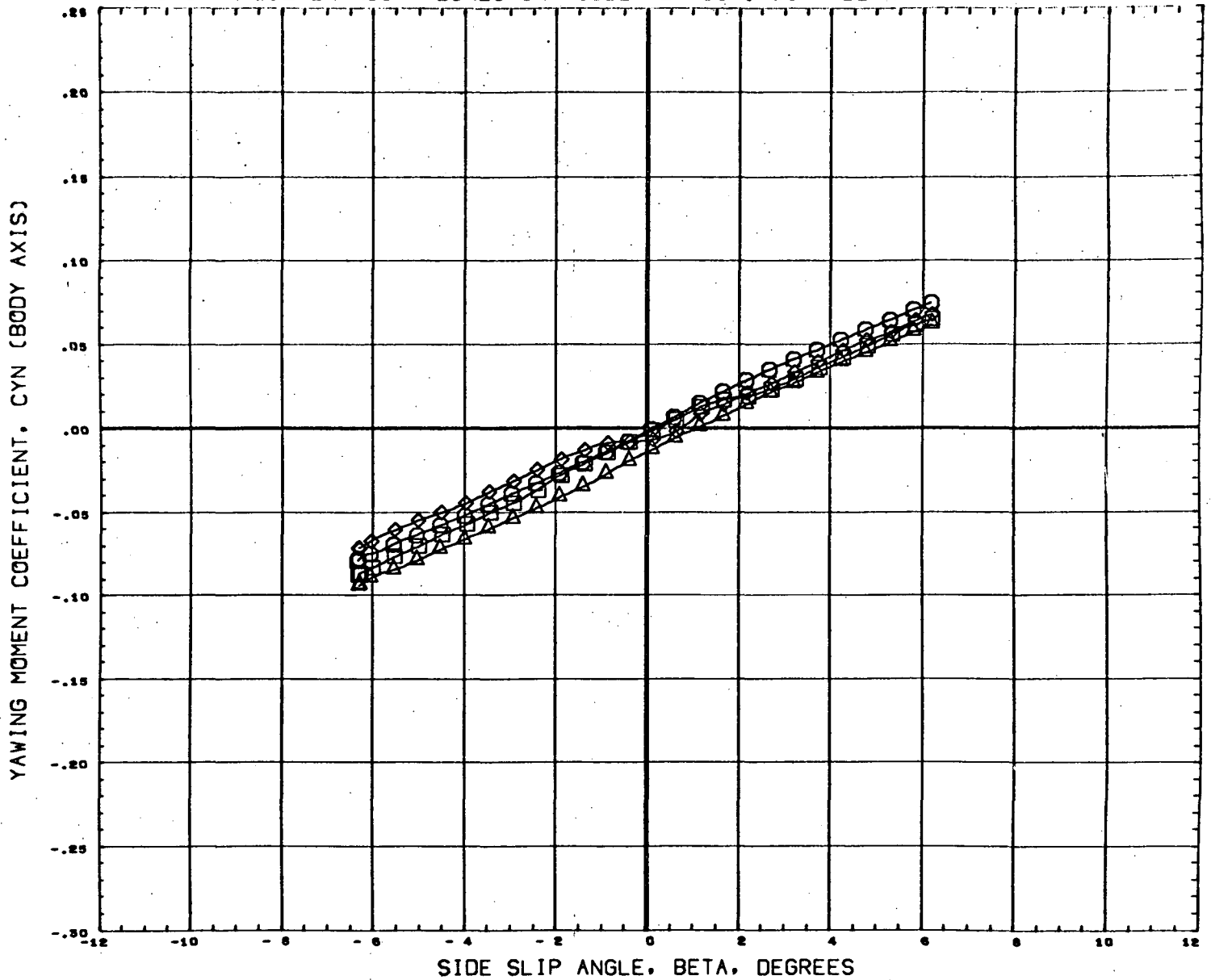
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(R07549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(R07553)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(R07563)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	BREF	882.0004	IN.
(R07567)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	10.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T3B6

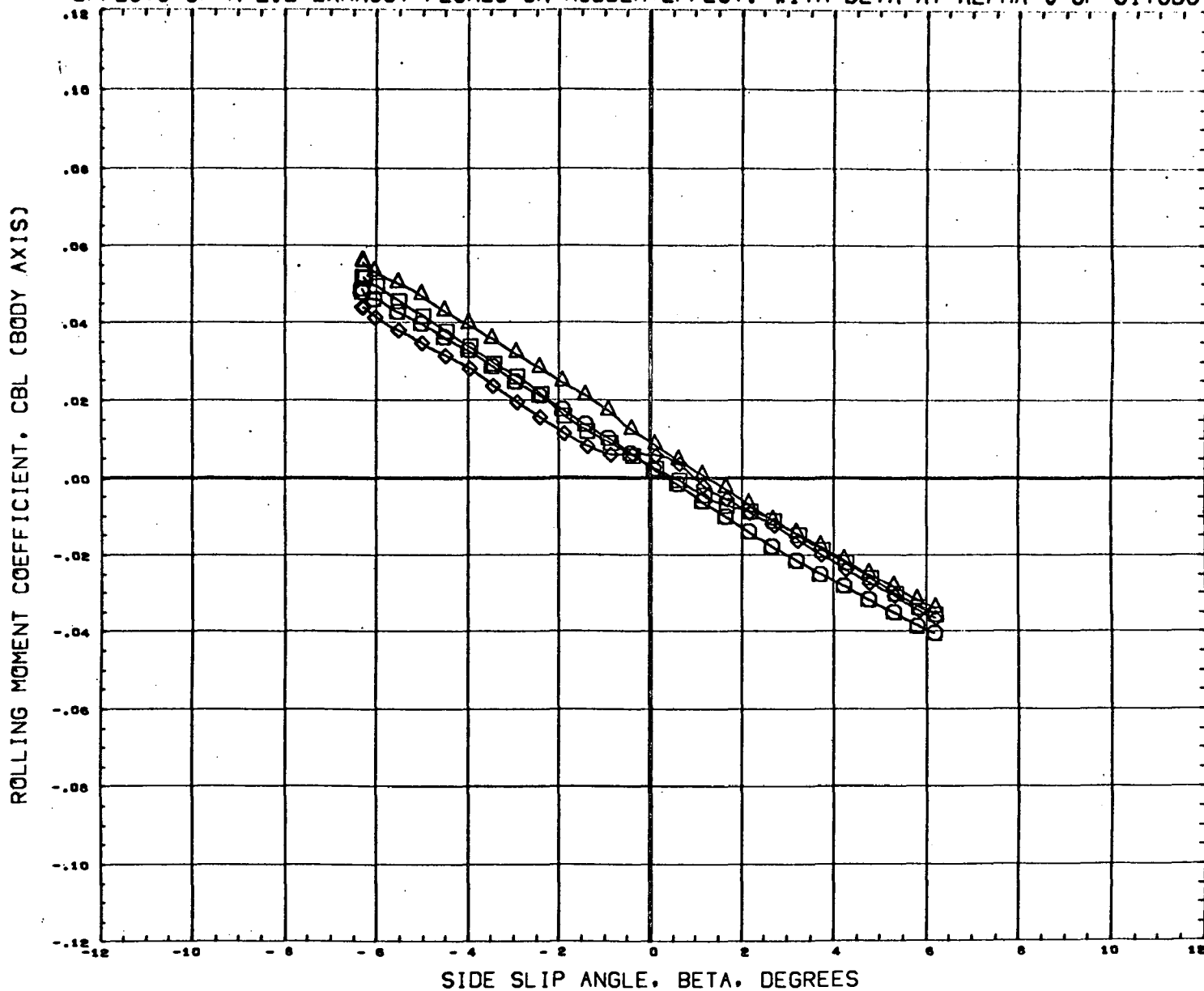


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7553)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.9004 IN.
(RD7563)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	SREF	882.0004 IN.
(RD7567)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T386

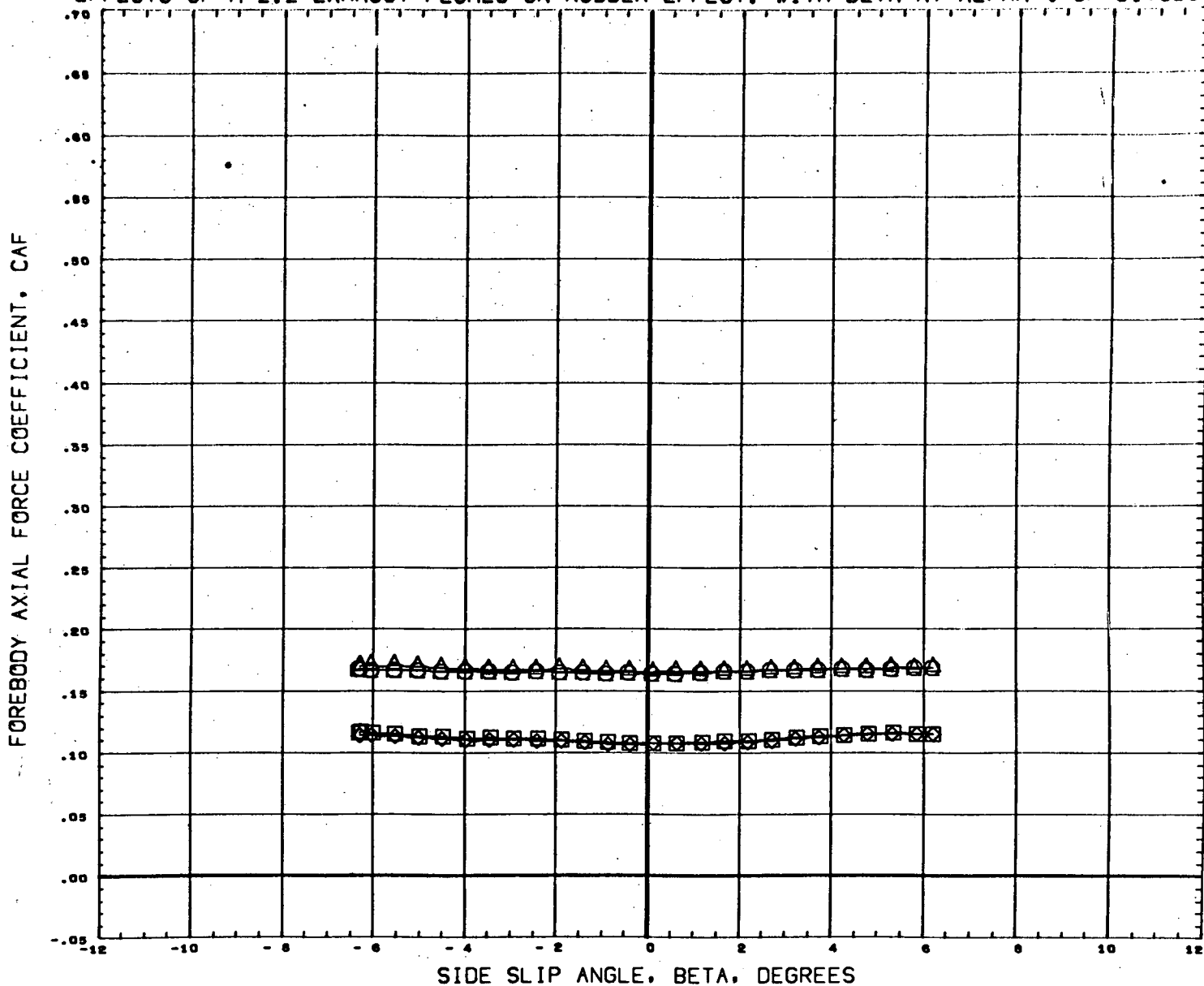


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(R07549)	MDAC S-222 COMPOSITE (T-CG) 01T386	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(R07553)	MDAC S-222 COMPOSITE (T-CG) 01T386	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(R07563)	MDAC S-222 COMPOSITE (T-CG) 01T386+PLUME (2.2)	0.000	0.000	0.000	0.000	BREF	682.0004 IN.
(R07567)	MDAC S-222 COMPOSITE (T-CG) 01T386+PLUME (2.2)	0.000	0.000	0.000	10.000	YMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH BETA AT ALPHA=0 OF 01T3B6

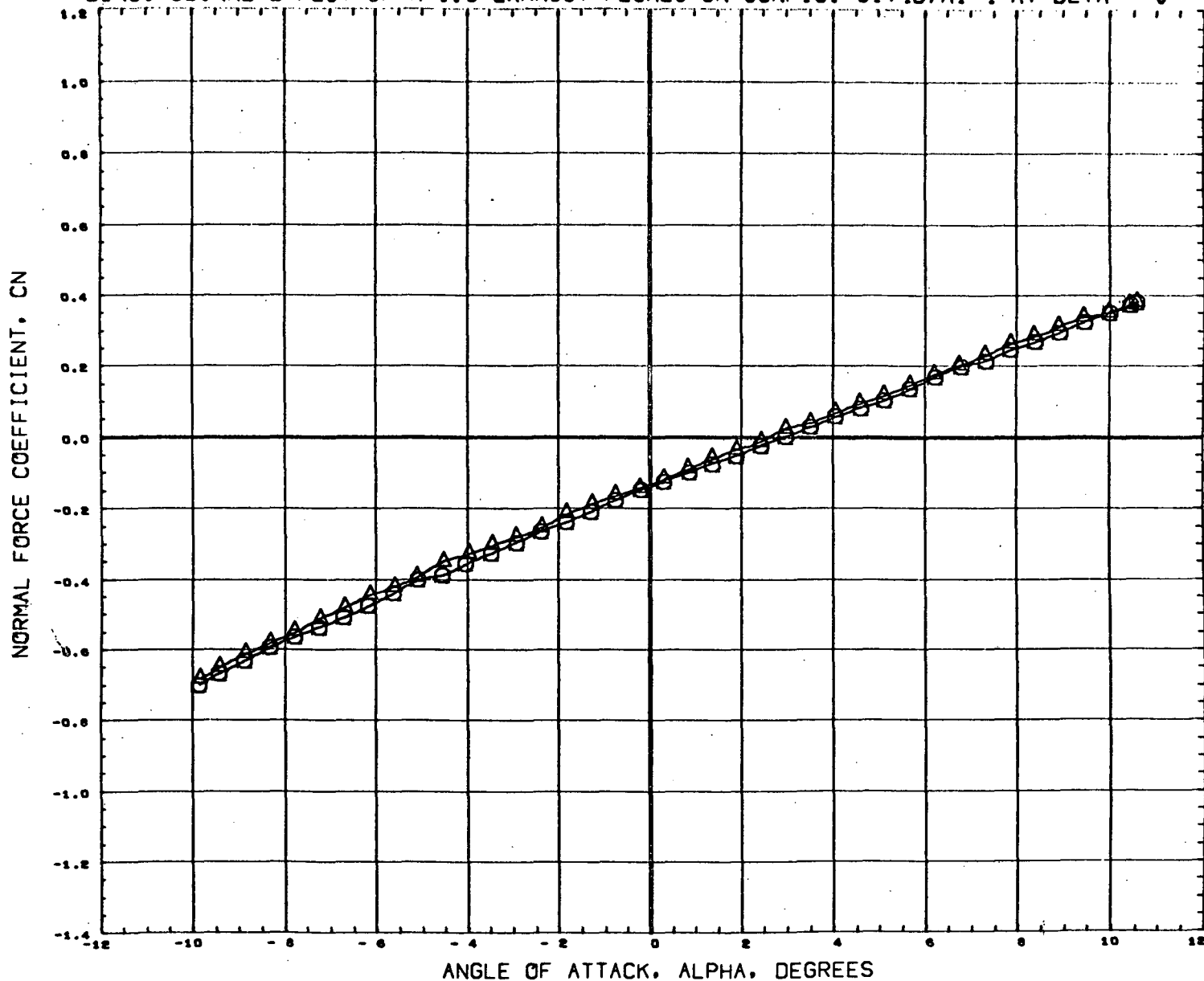


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7549)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7553)	MDAC S-222 COMPOSITE (T-CG) 01T3B6	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7563)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7567)	MDAC S-222 COMPOSITE (T-CG) 01T3B6+PLUME (2.2)	0.000	0.000	0.000	10.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

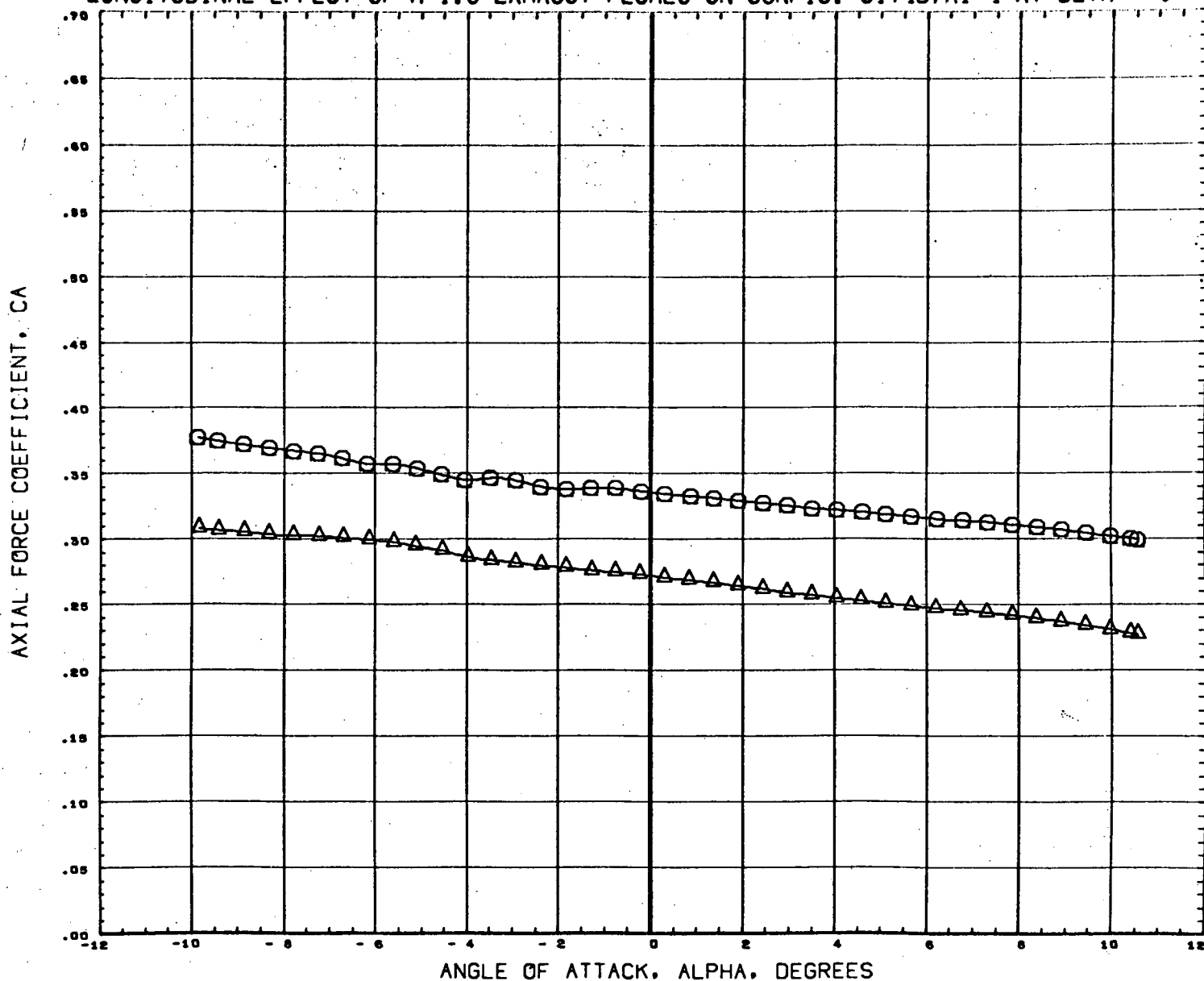


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

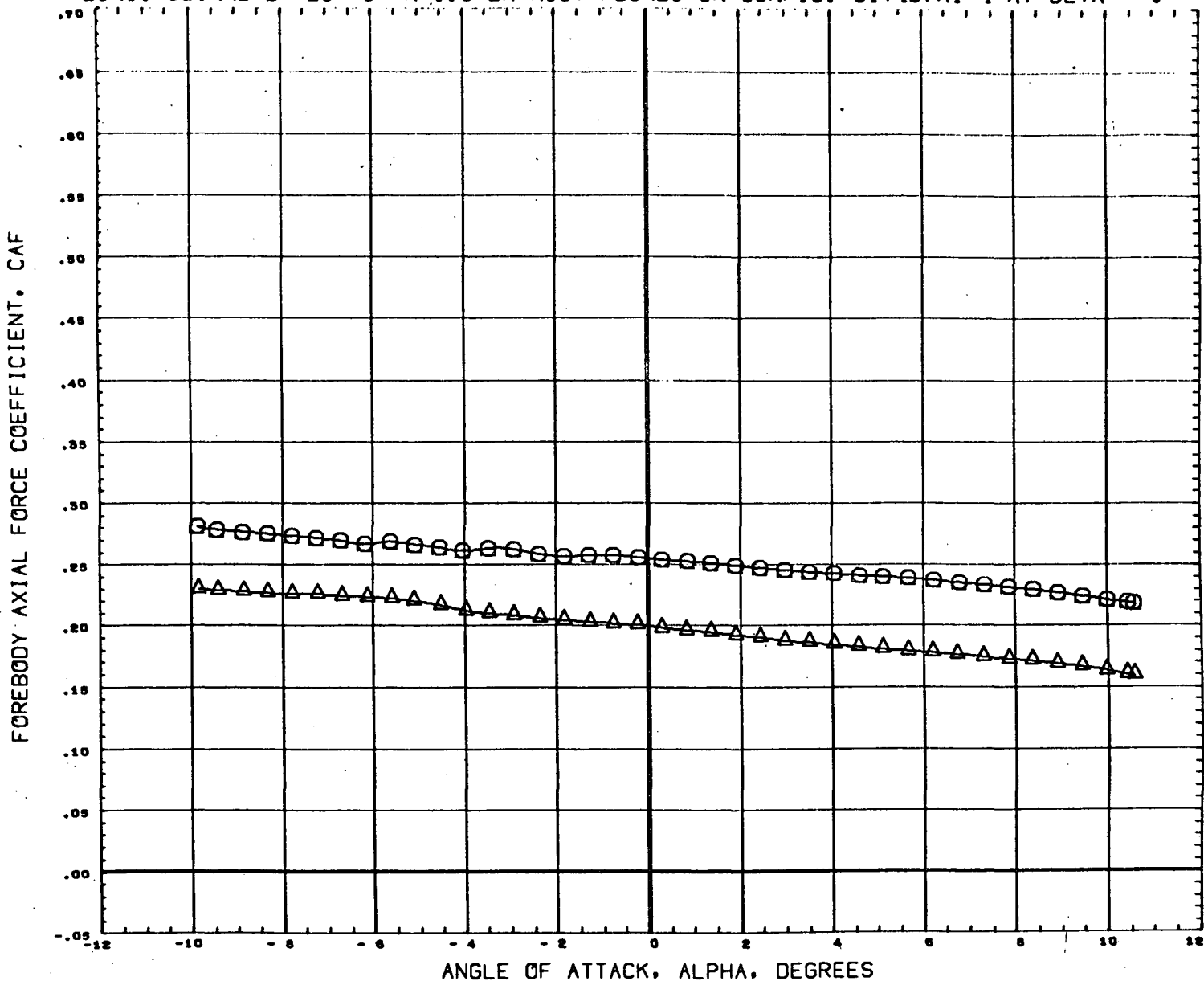


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(CD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

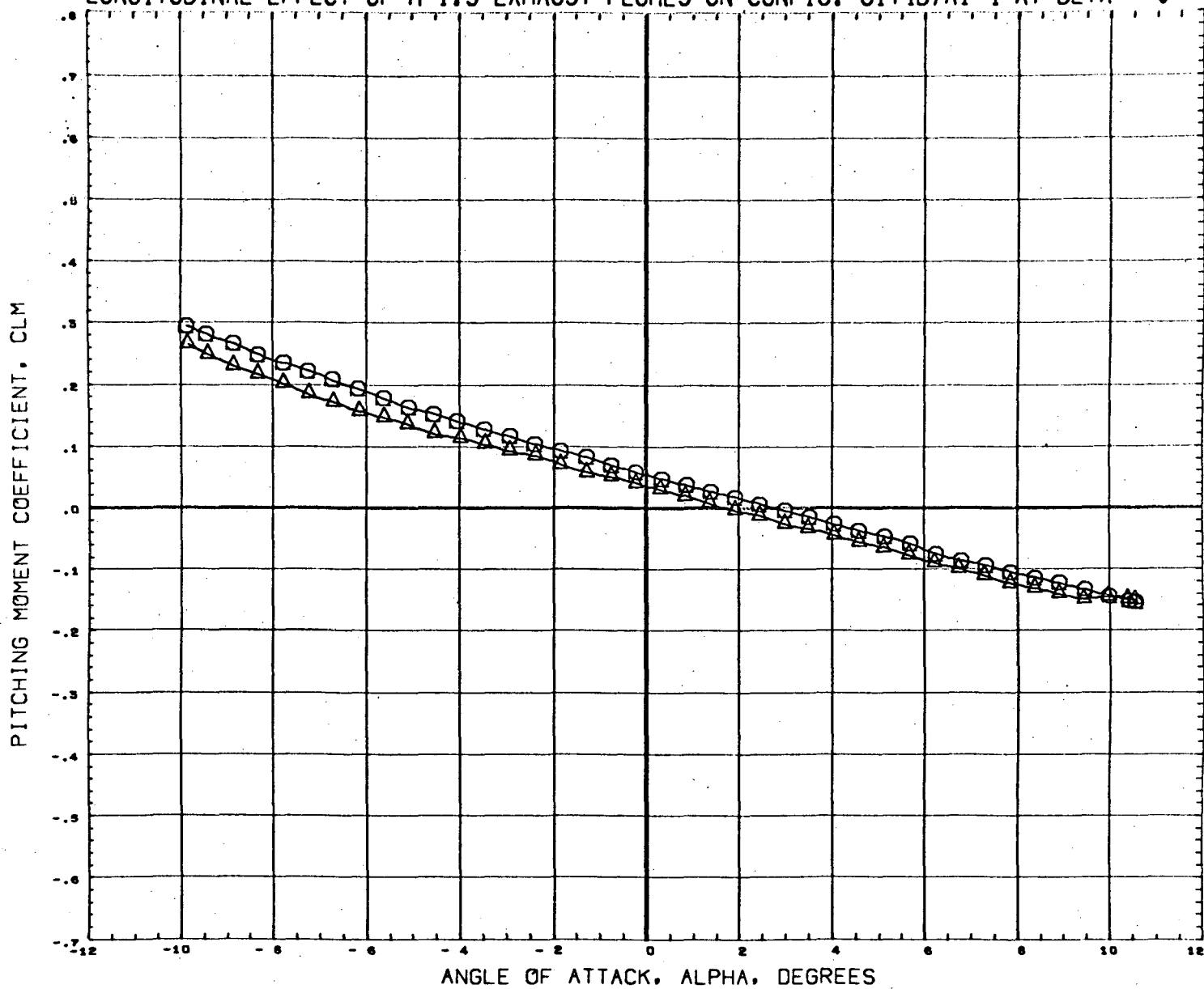


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

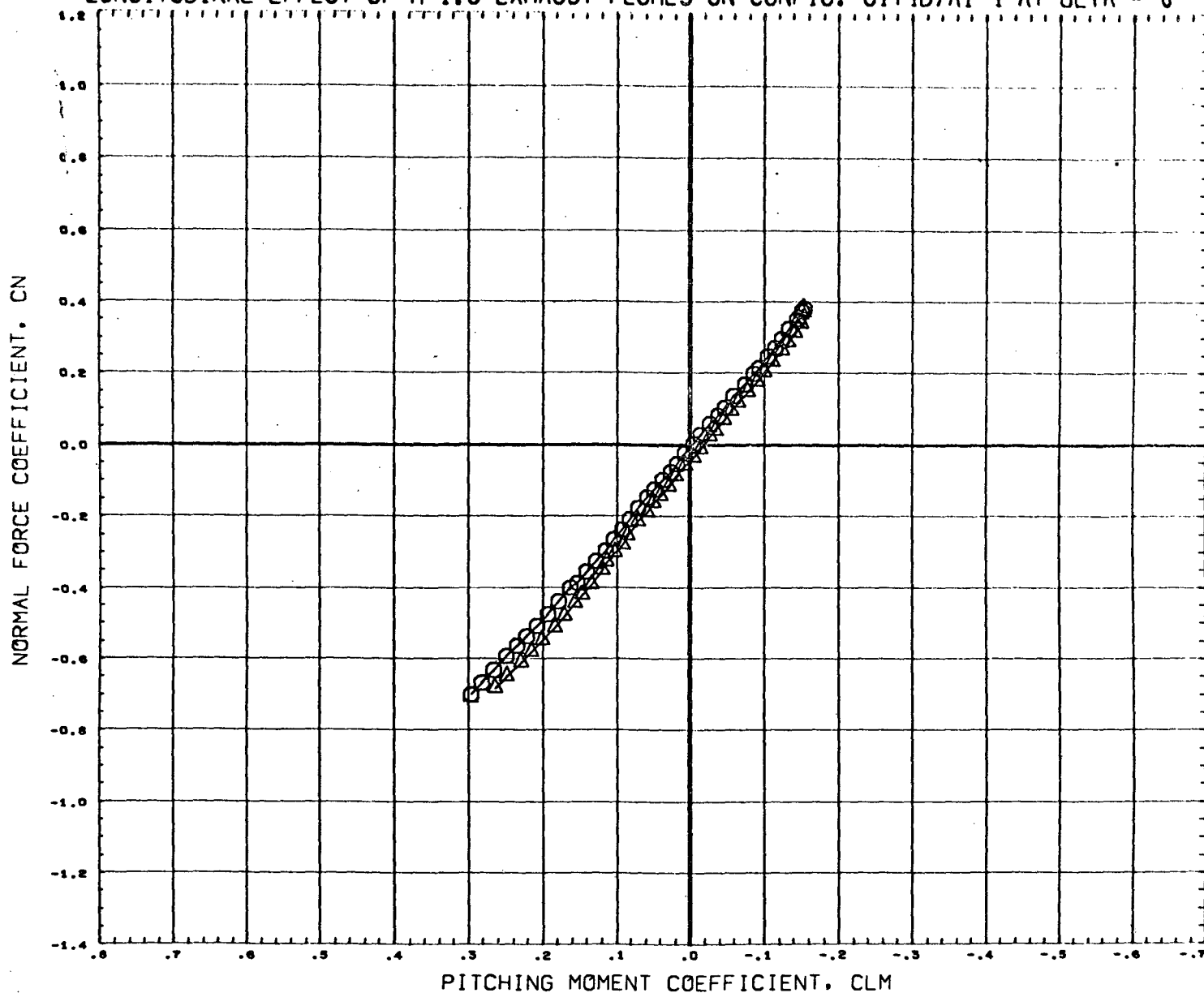


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0



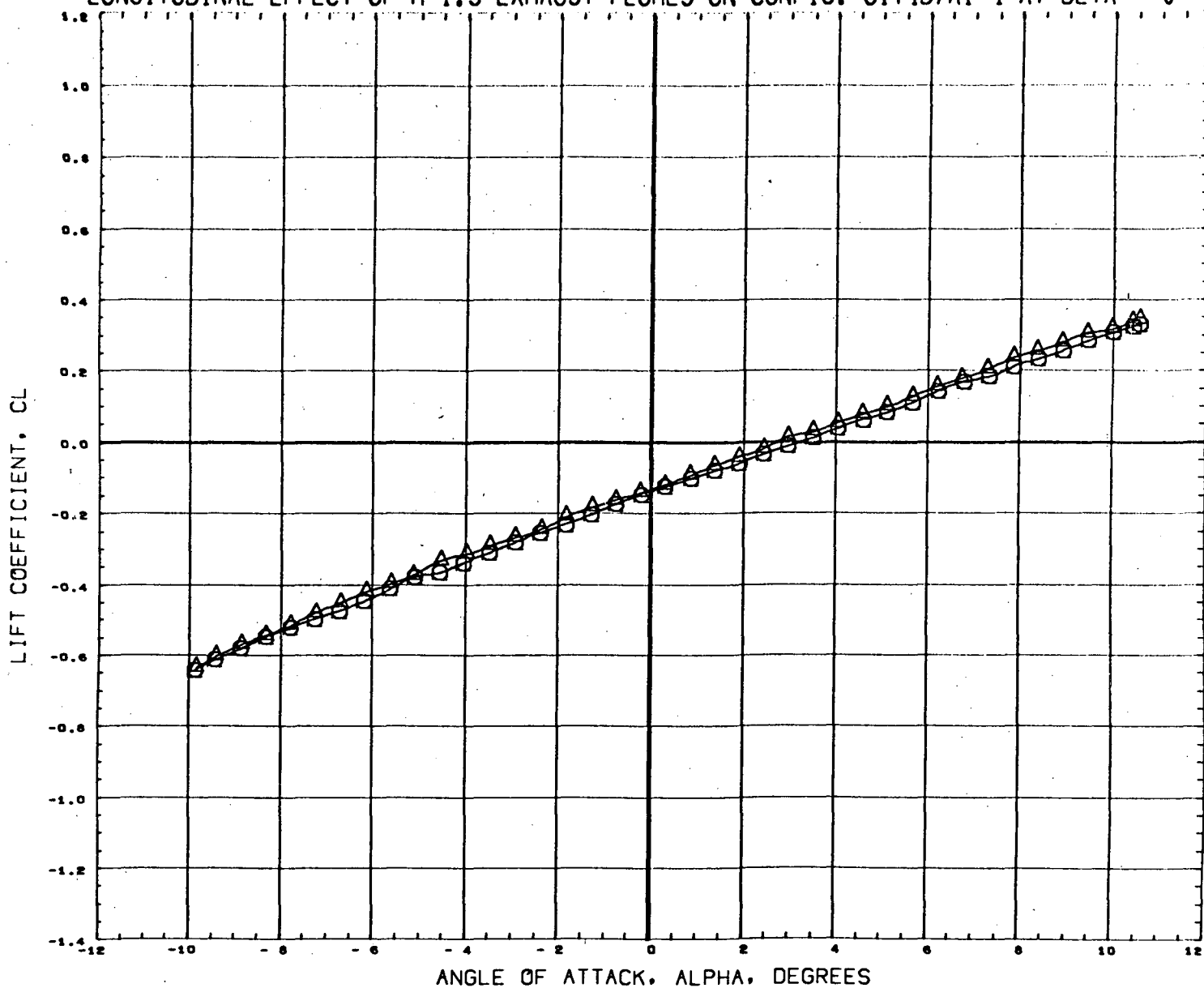
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.9004 IN.
						SREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

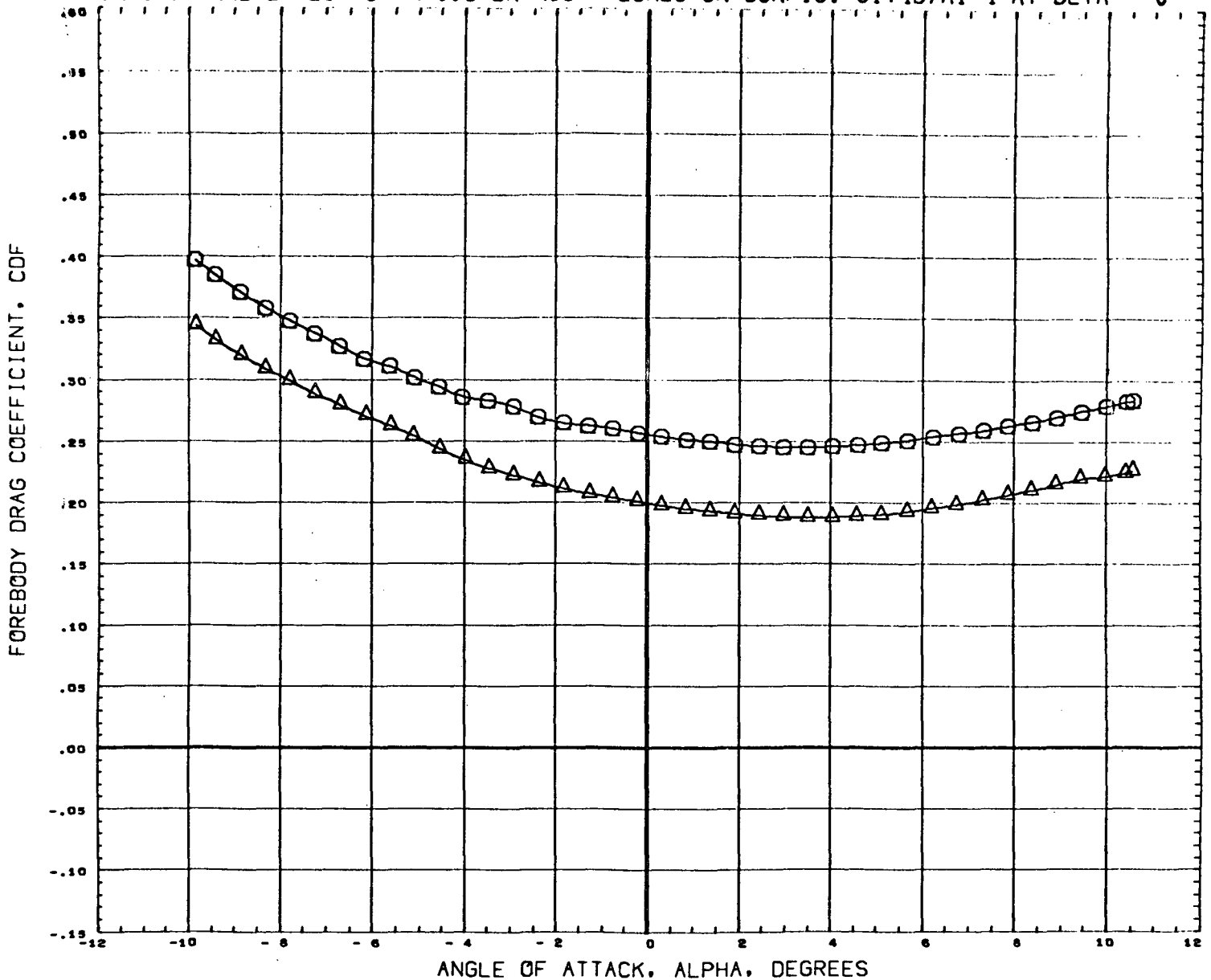


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	NDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	NDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

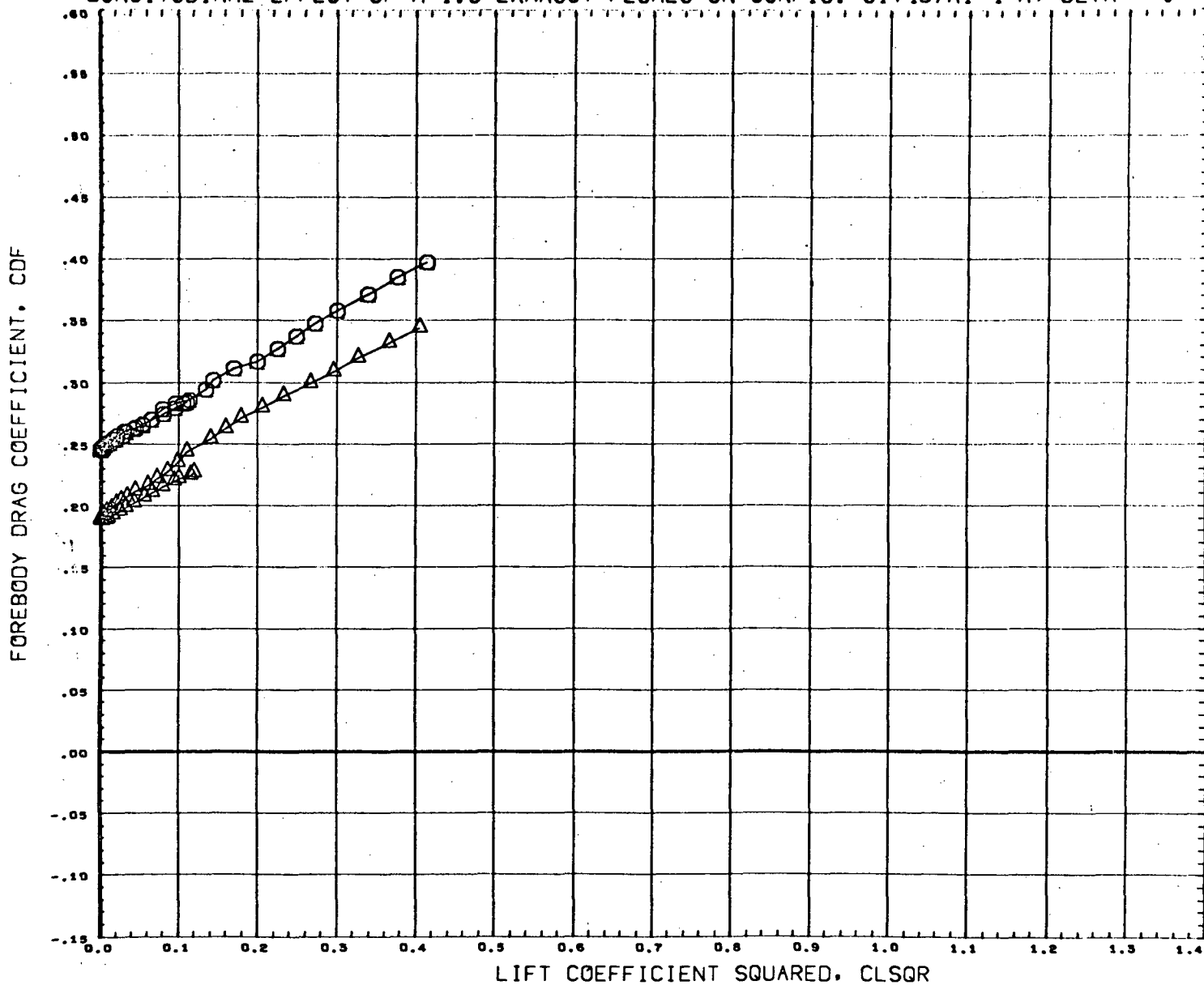


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

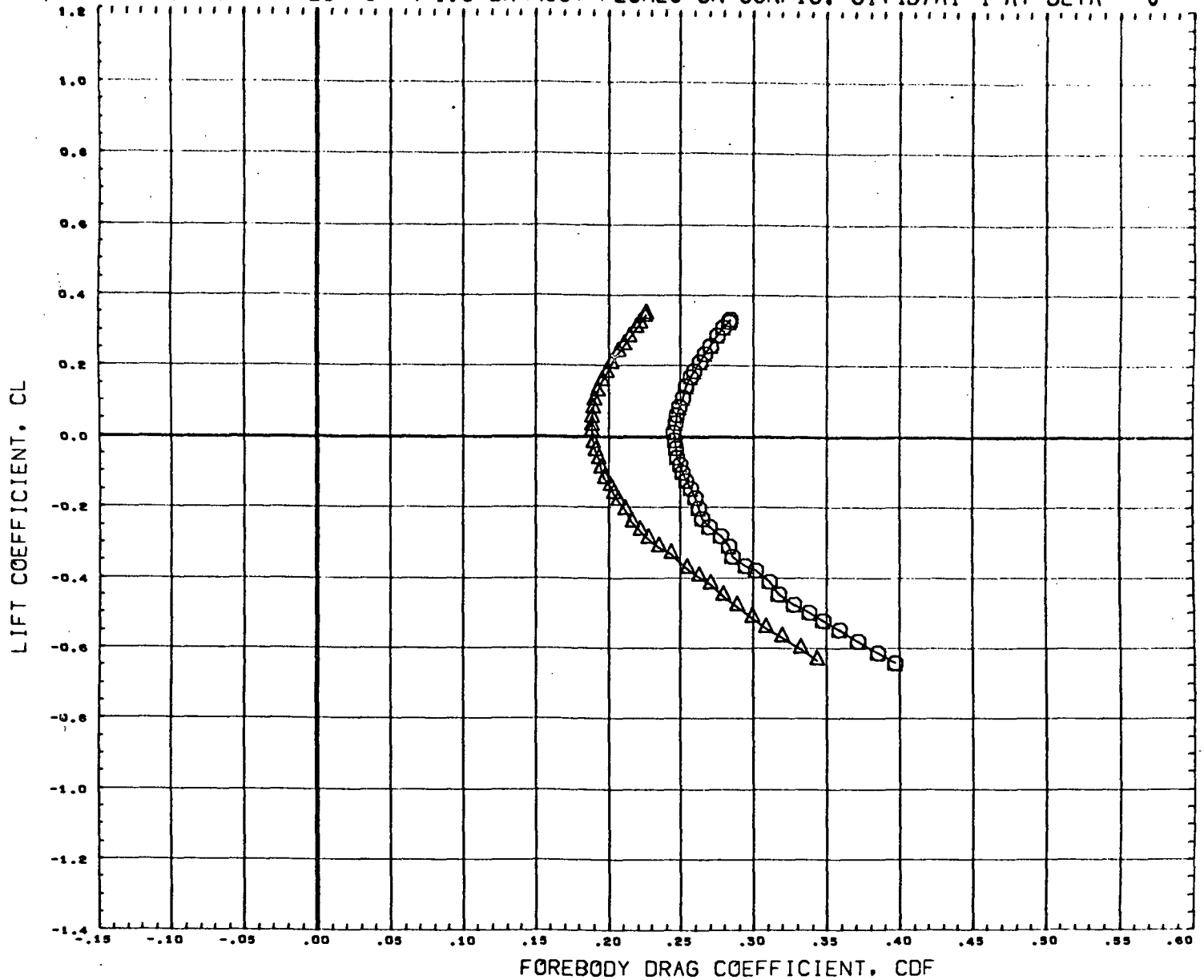


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

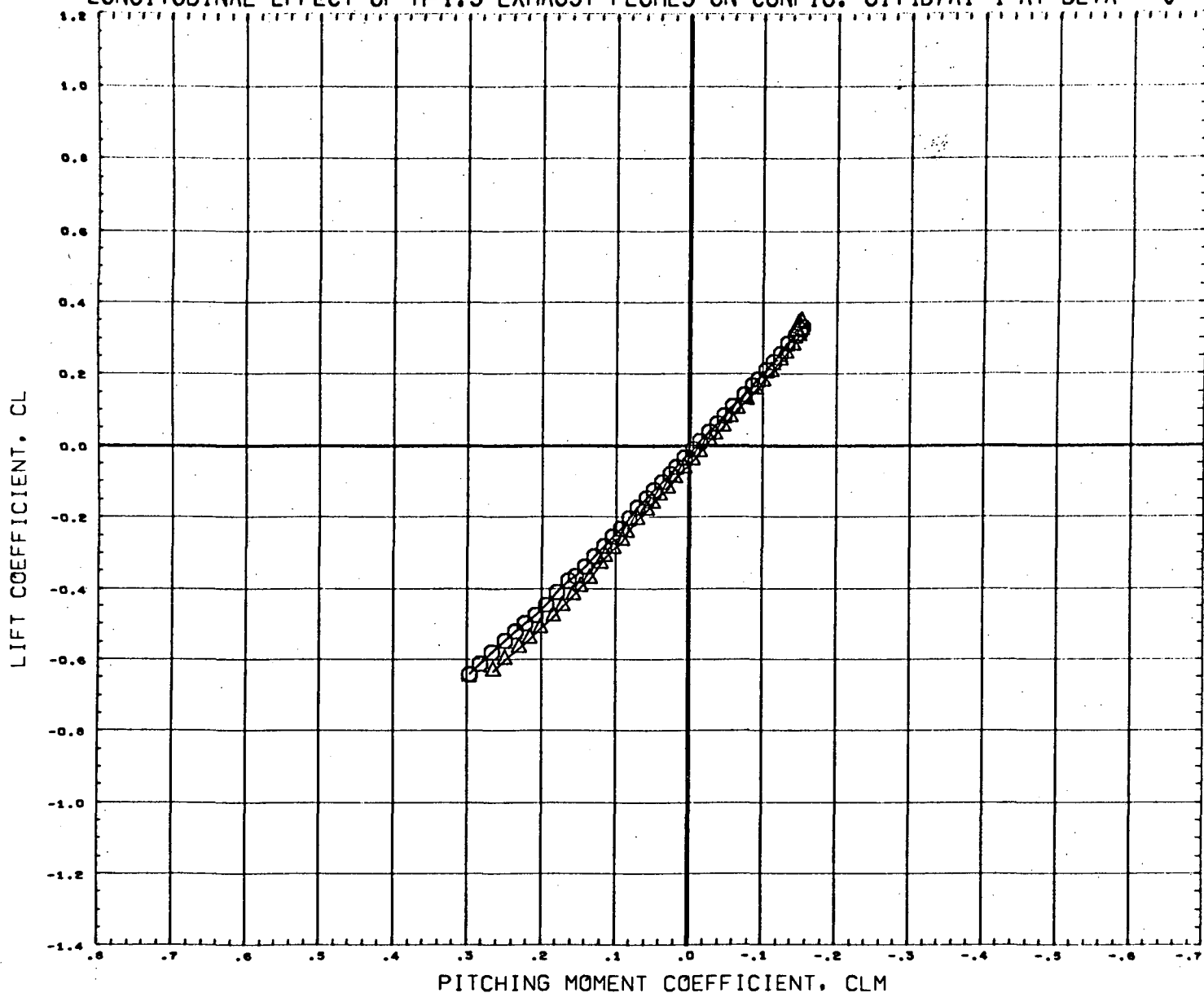


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

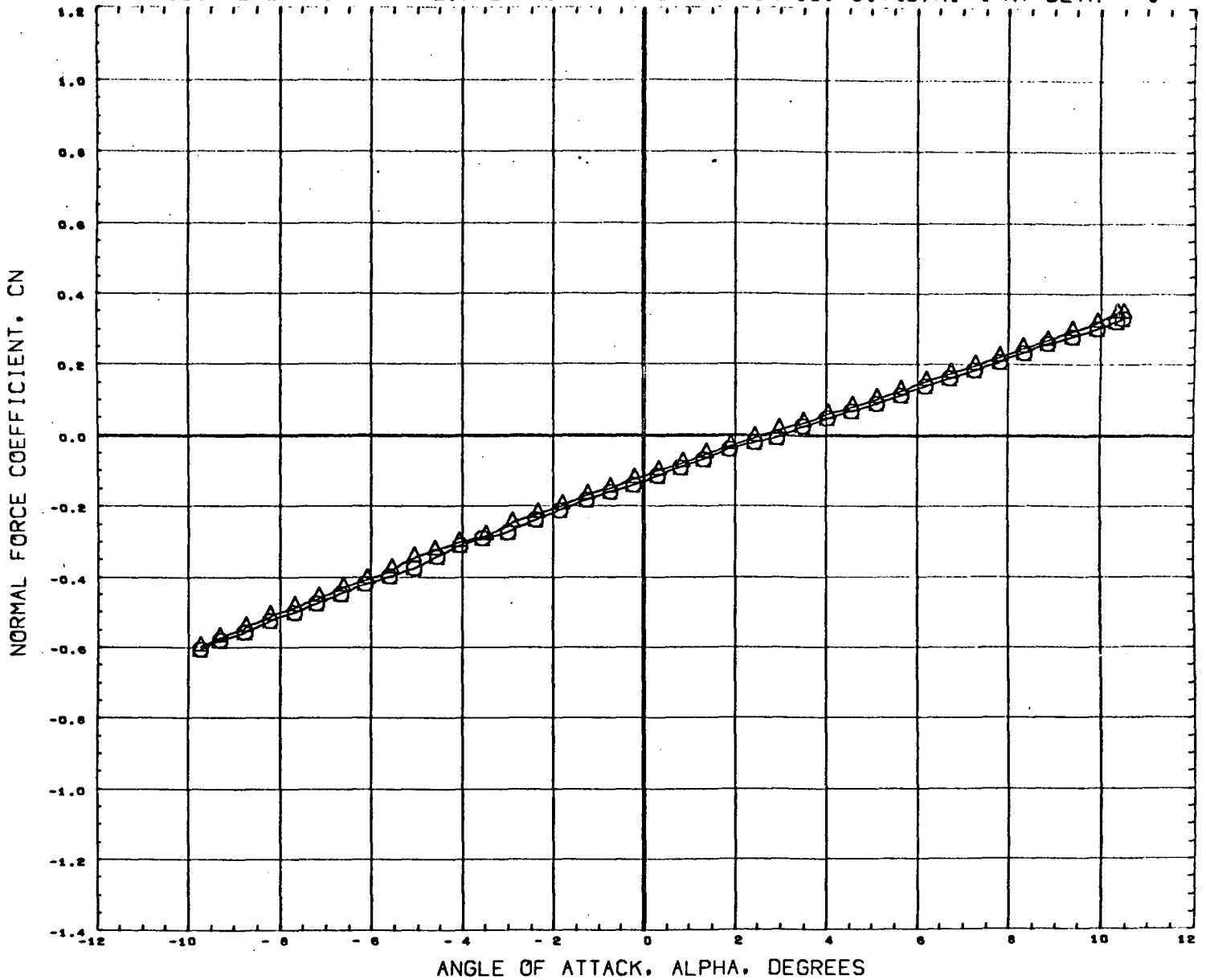


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7574)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	357.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

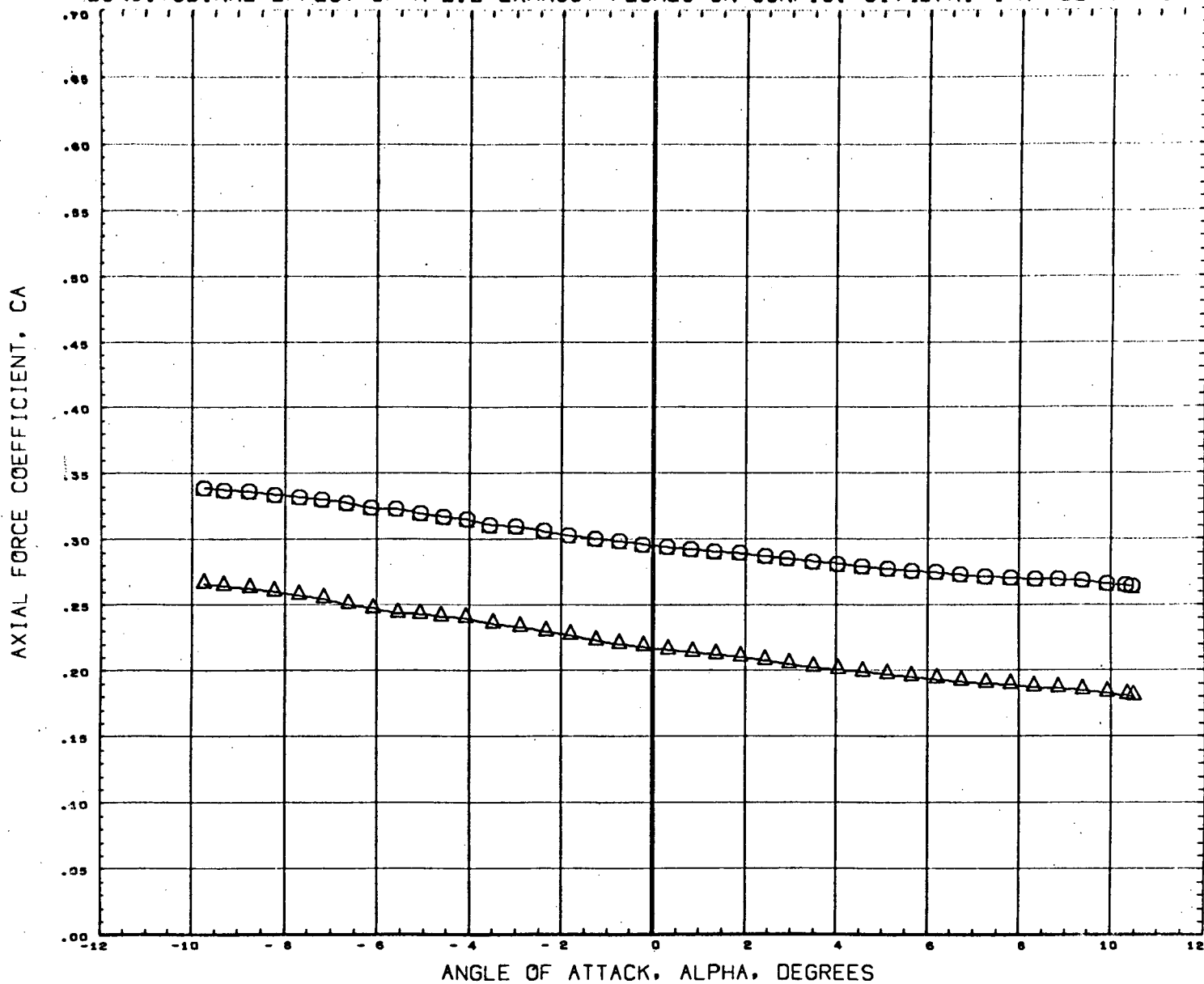


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

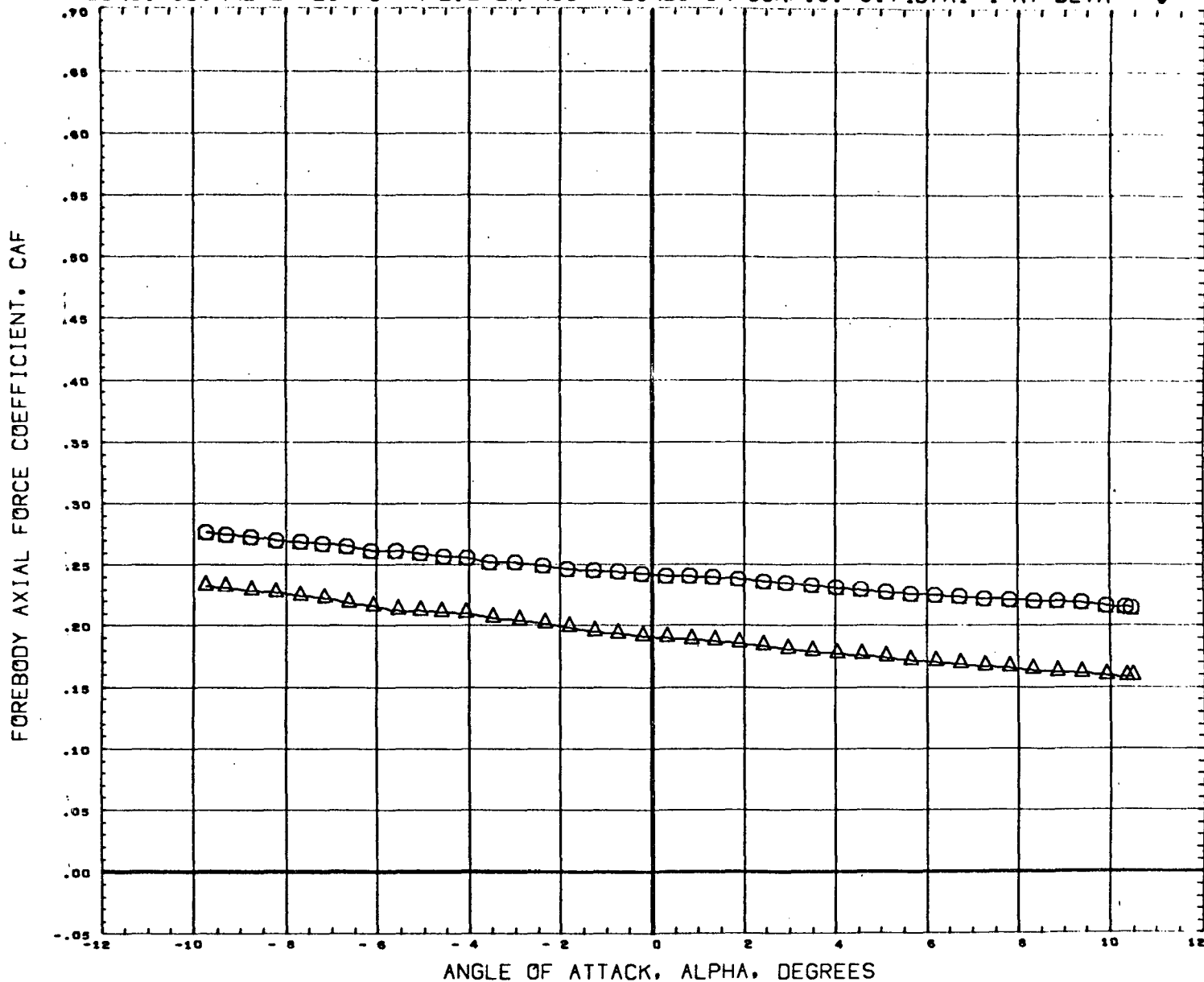


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7580)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0080

MACH 2.20

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0



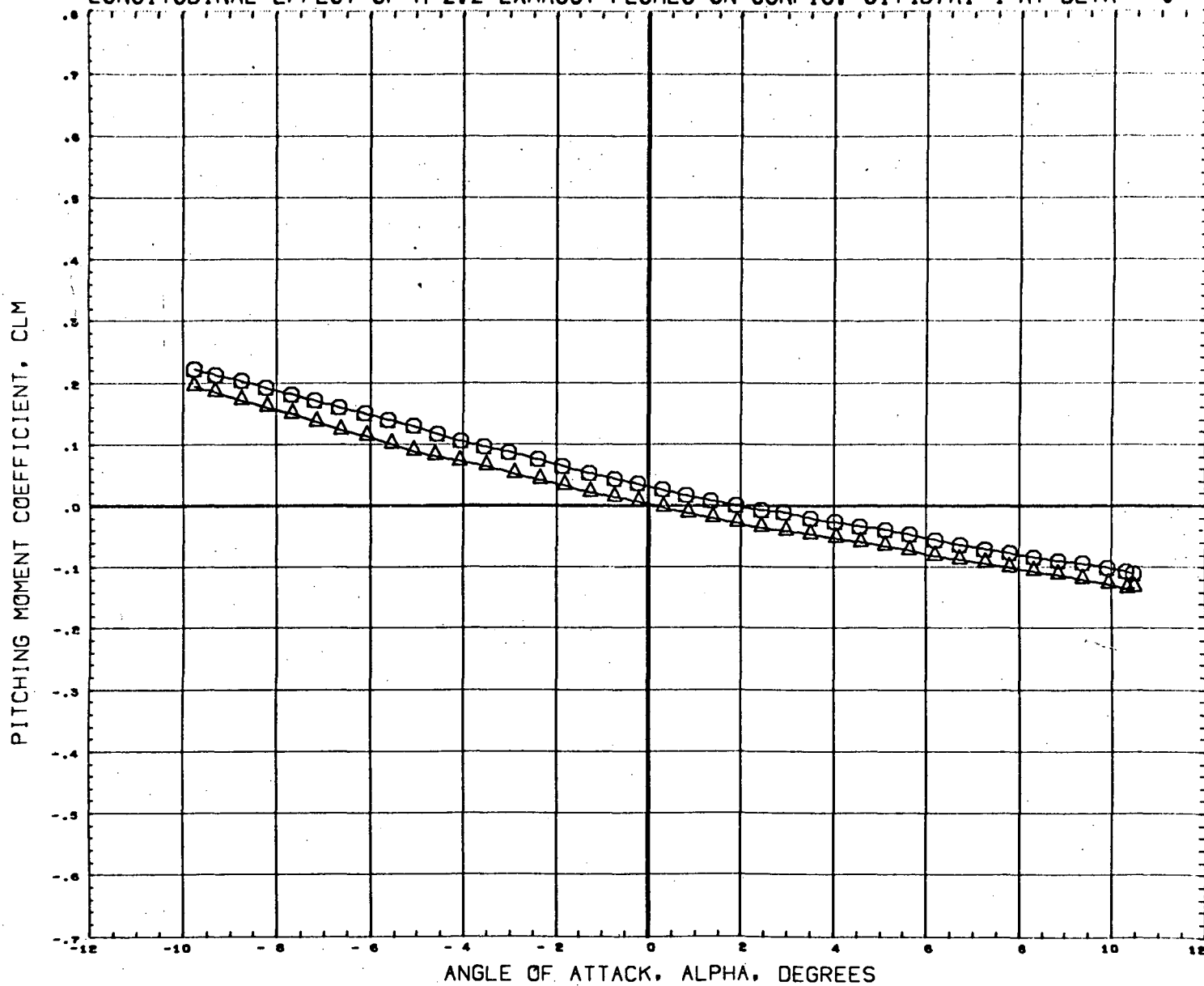
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7972)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7980)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

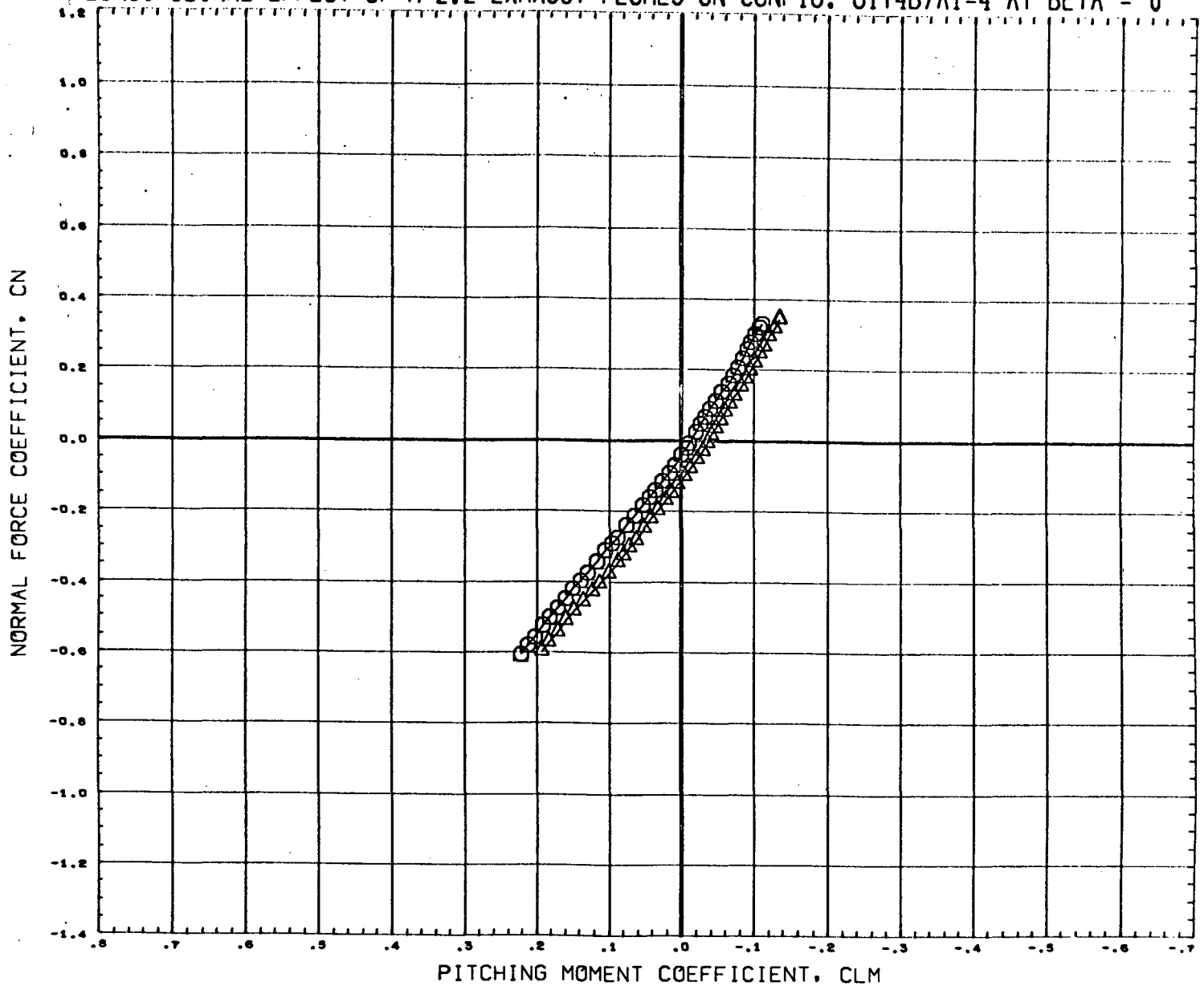


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7580)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

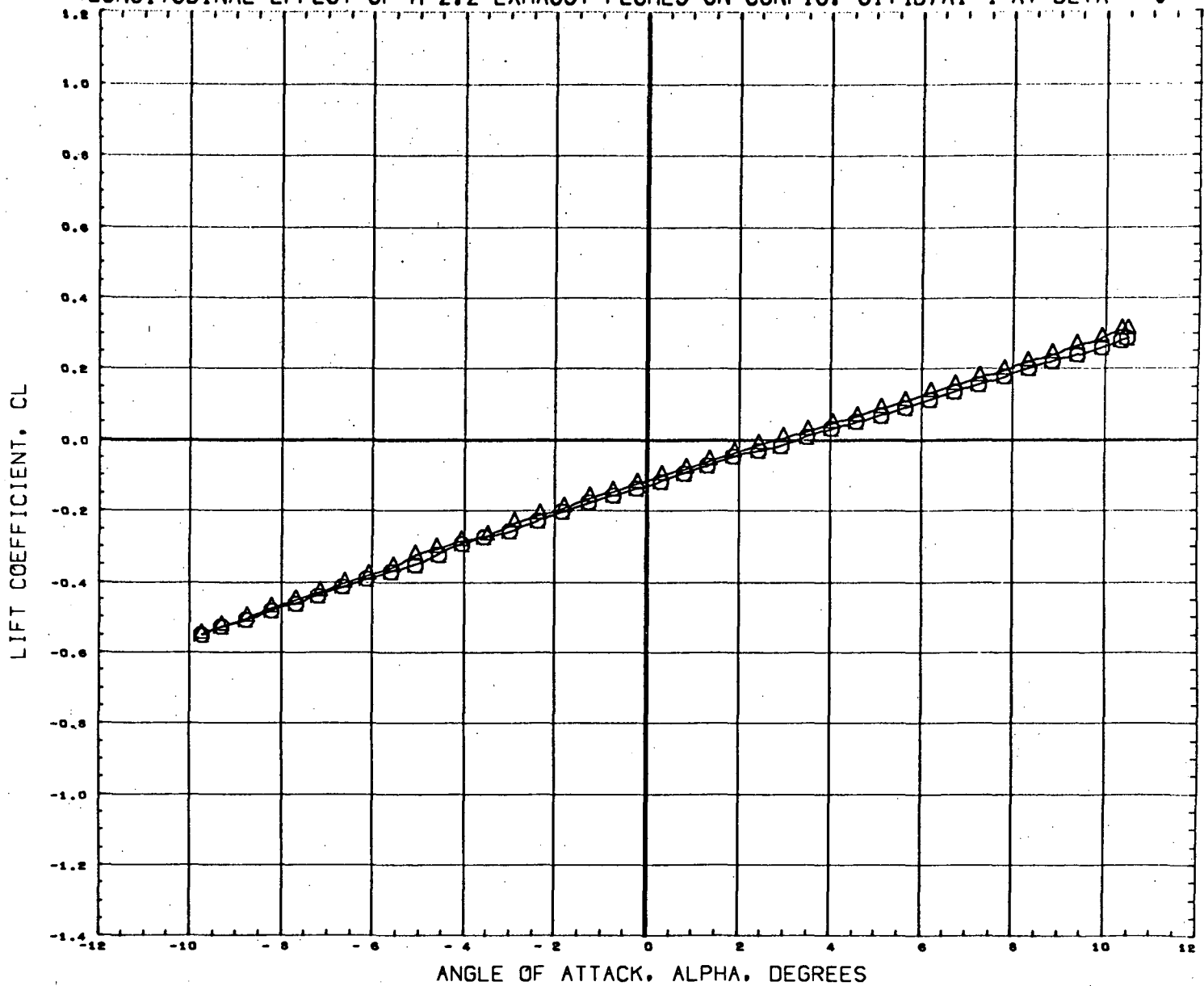


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

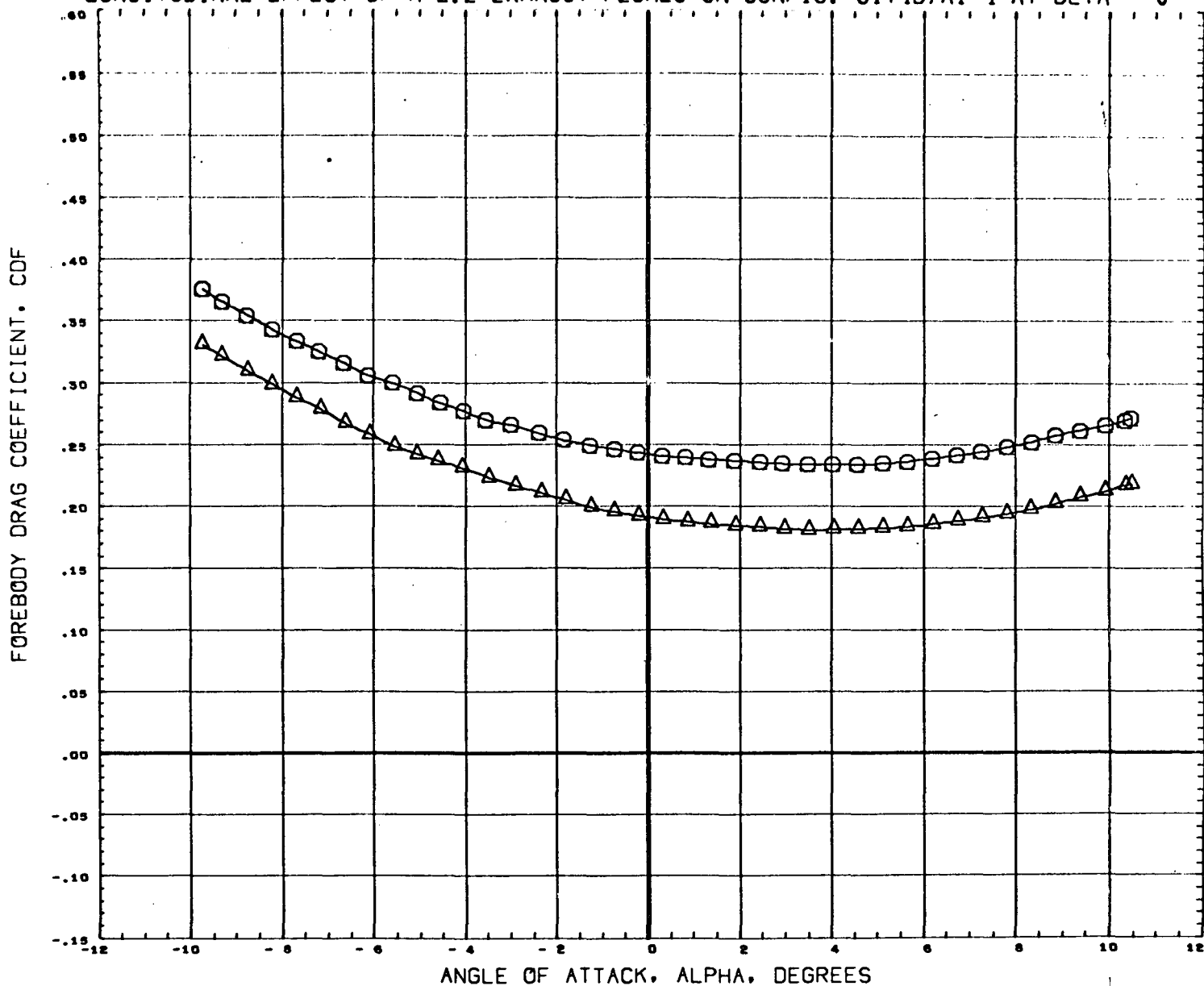


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.9004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

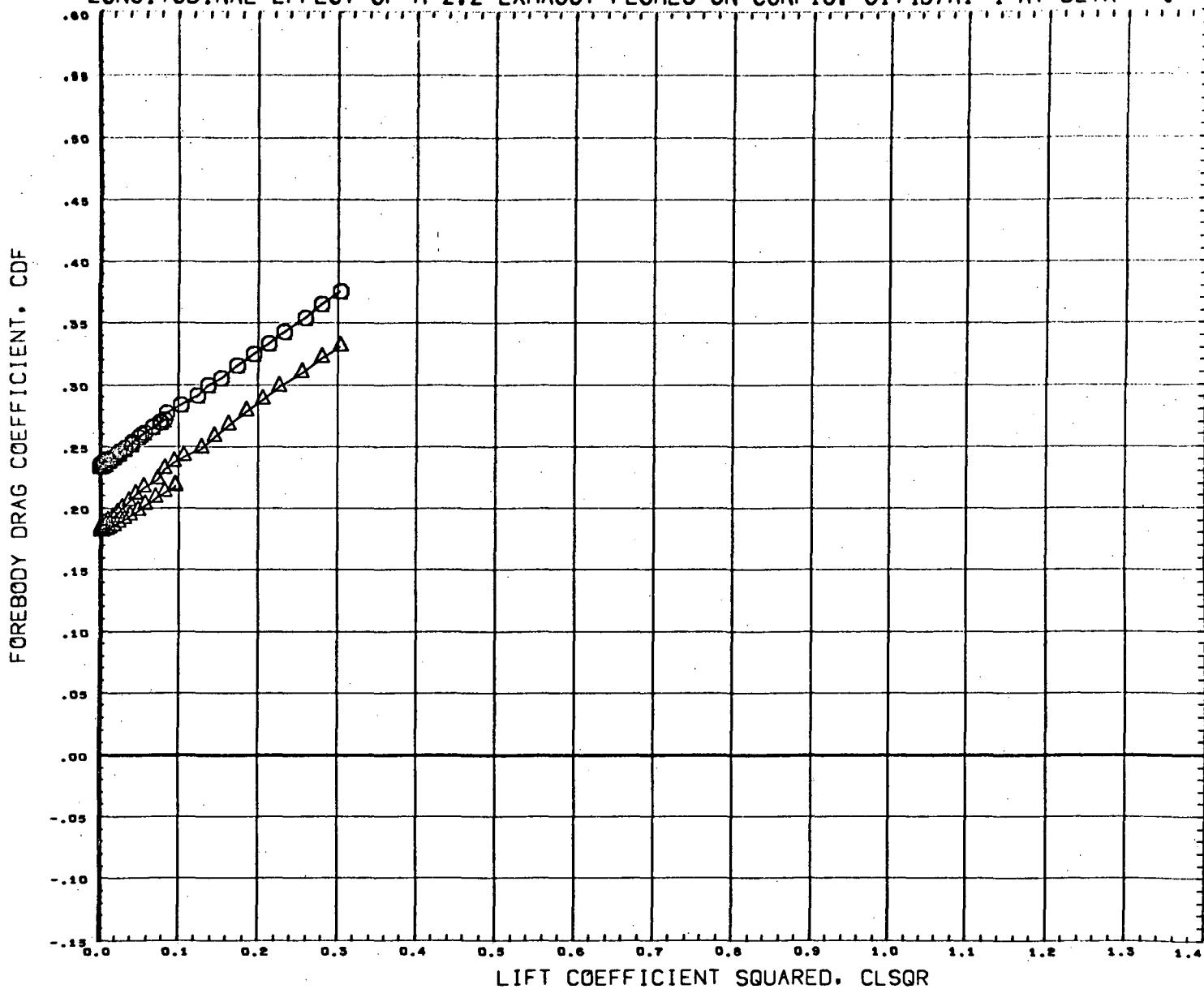


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

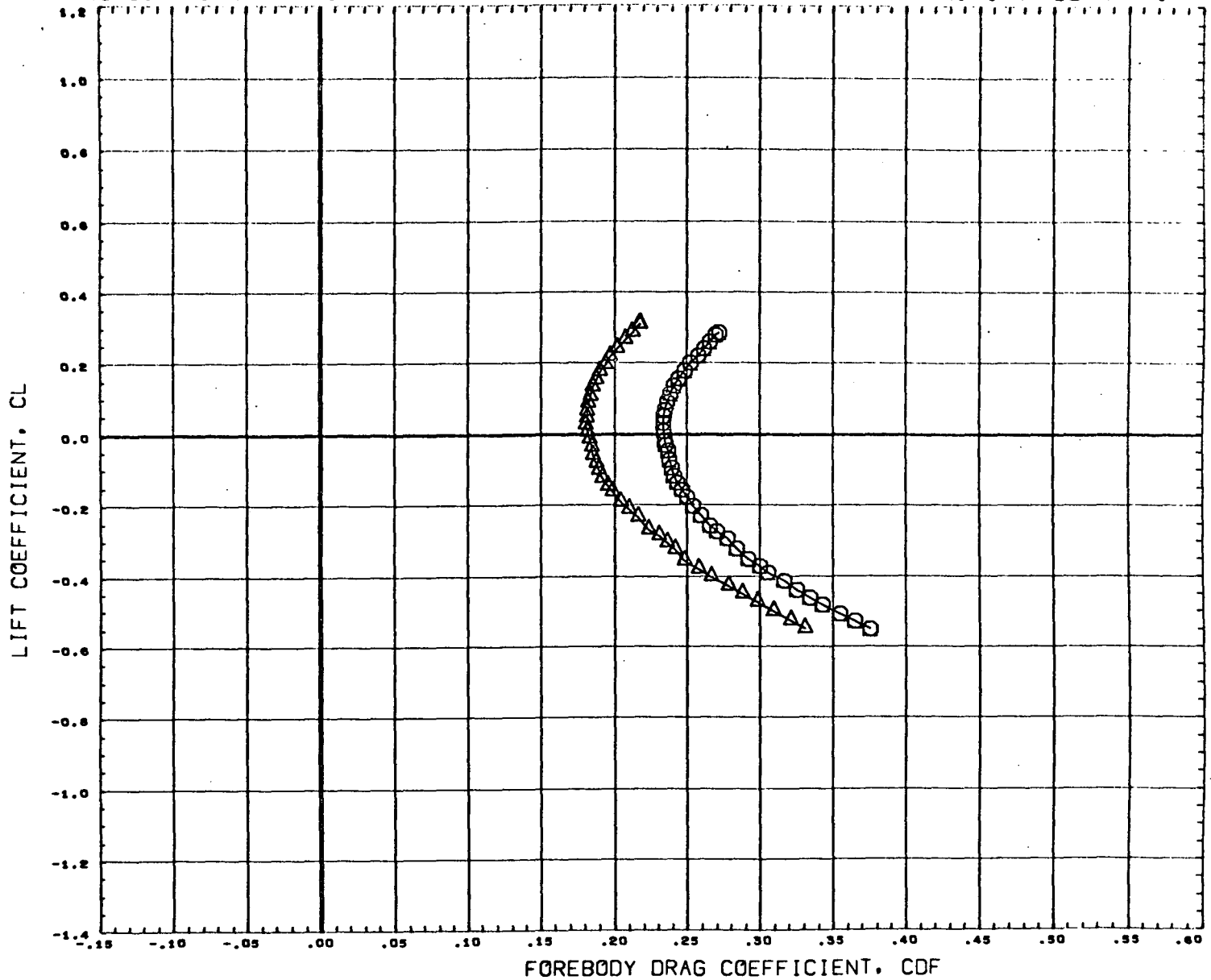


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0

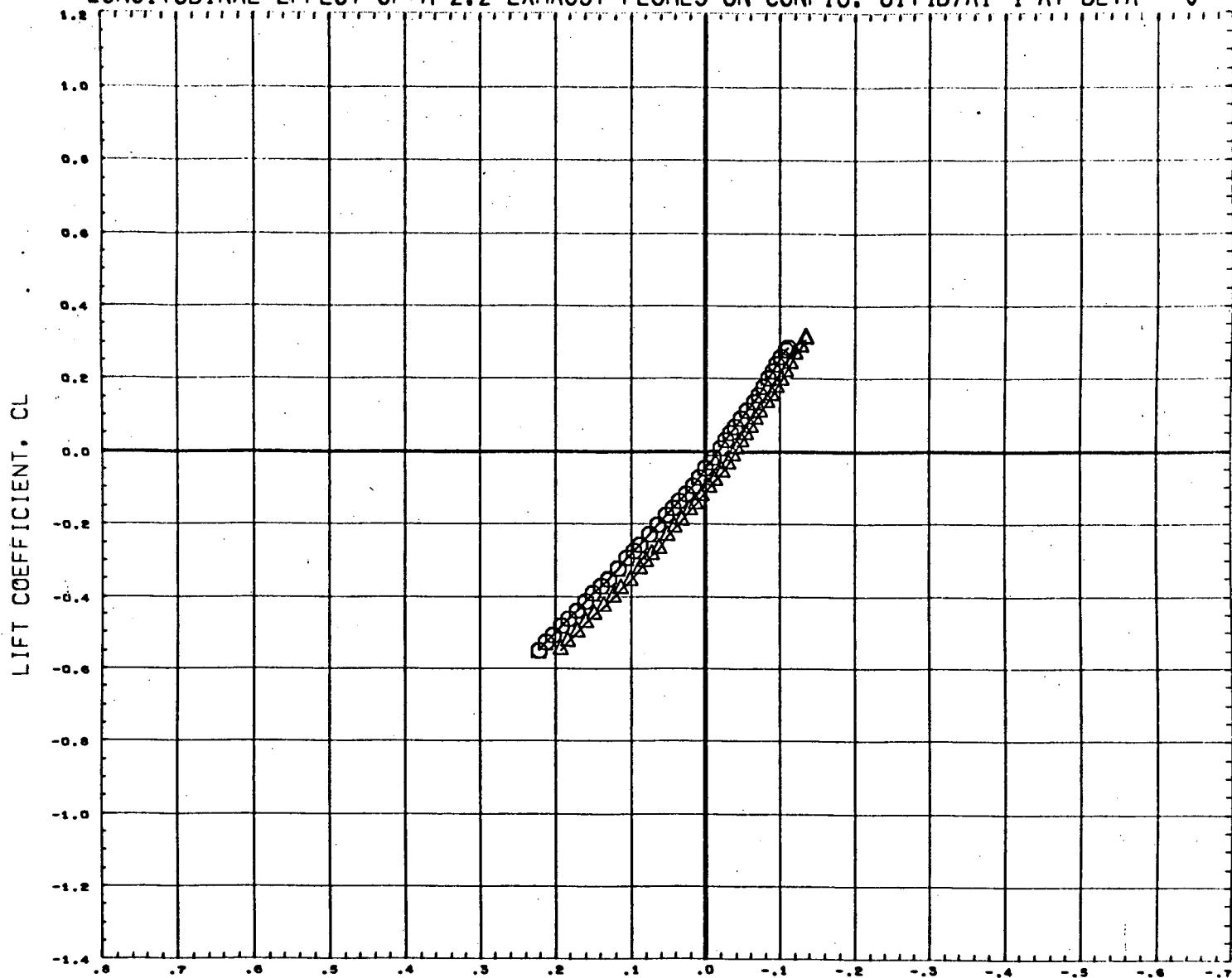


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7572)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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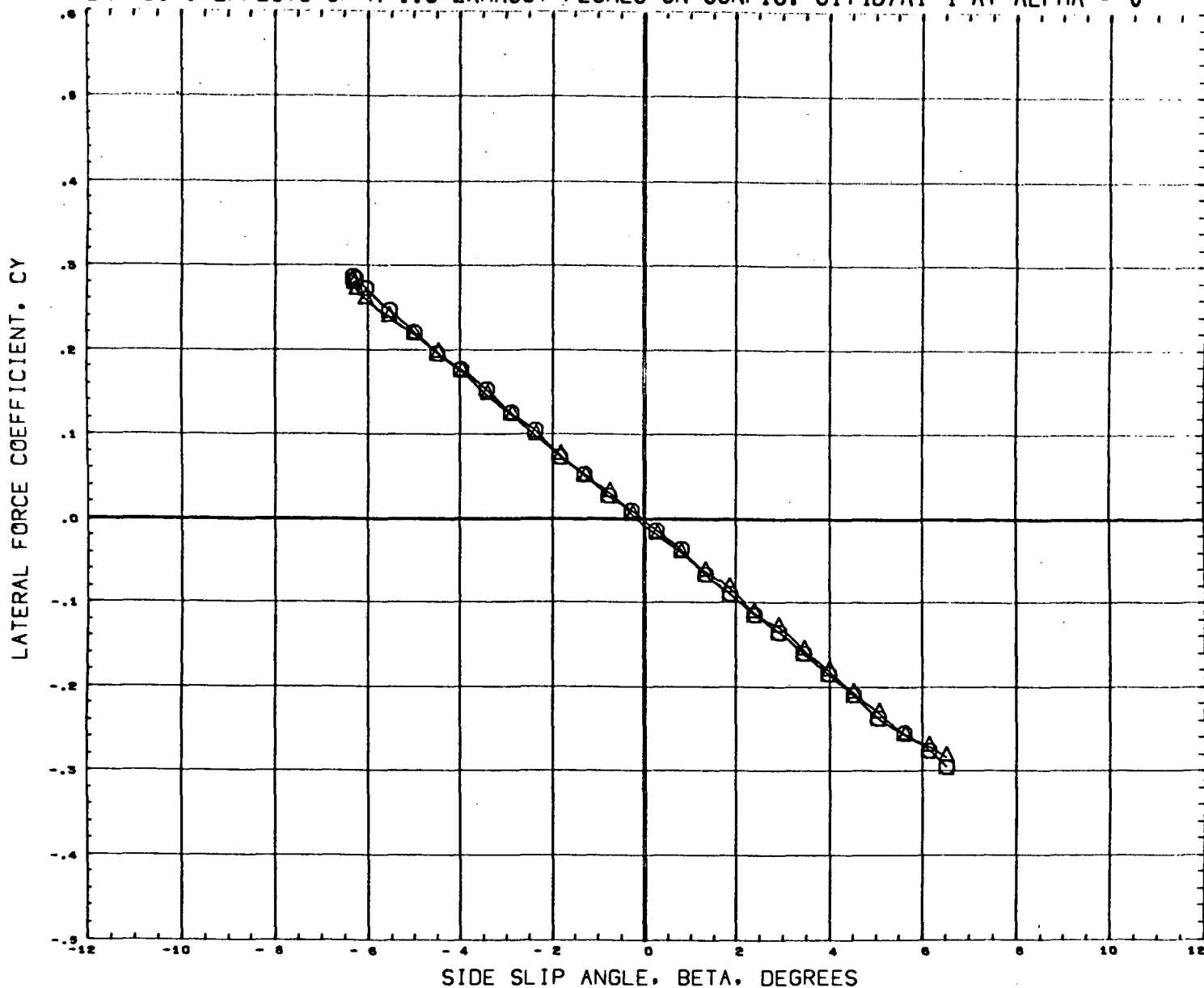
# LONGITUDINAL EFFECT OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT BETA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07572)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07580)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

# LAT-DIR. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT ALPHA = 0



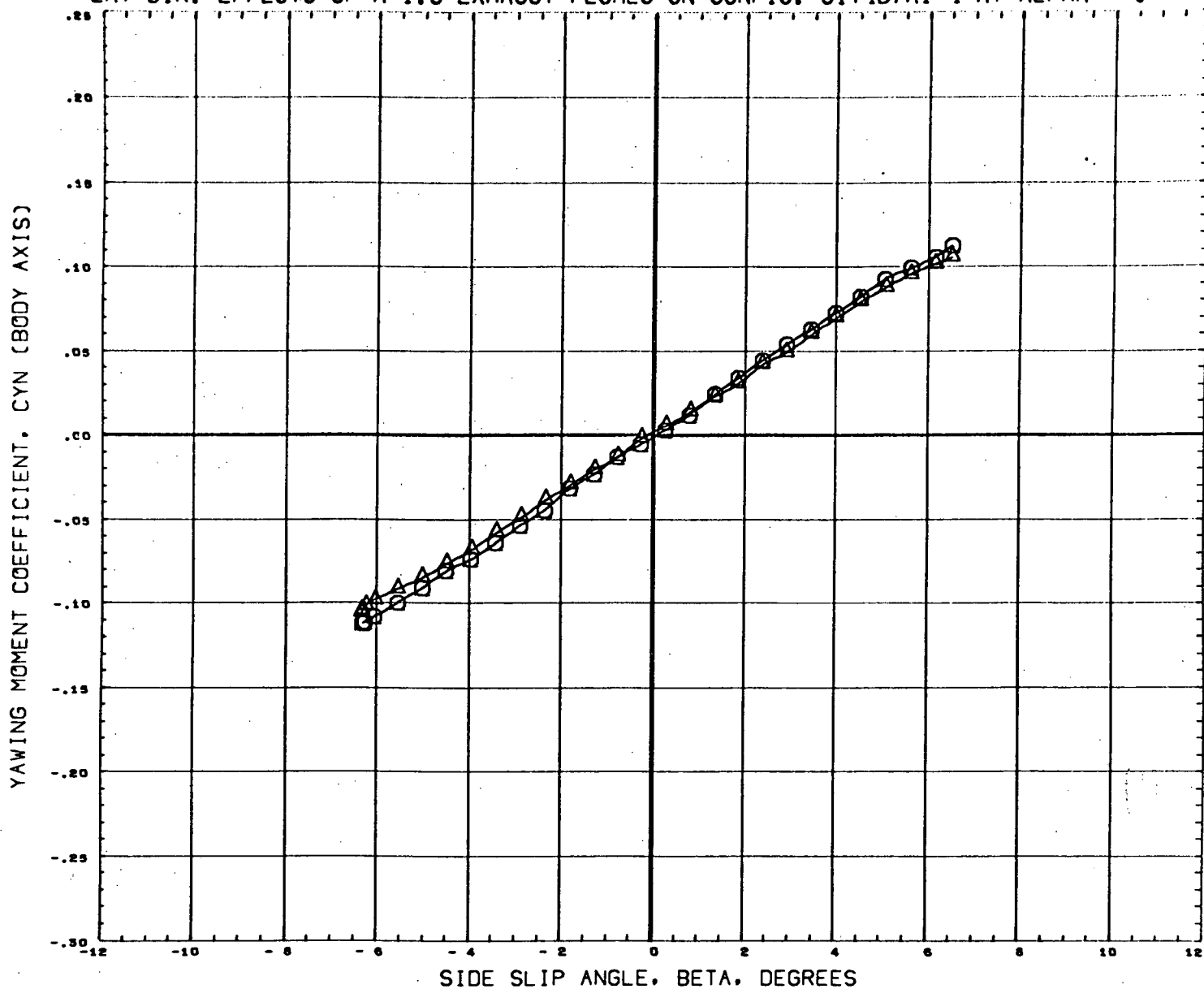
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7573)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7575)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT ALPHA = 0

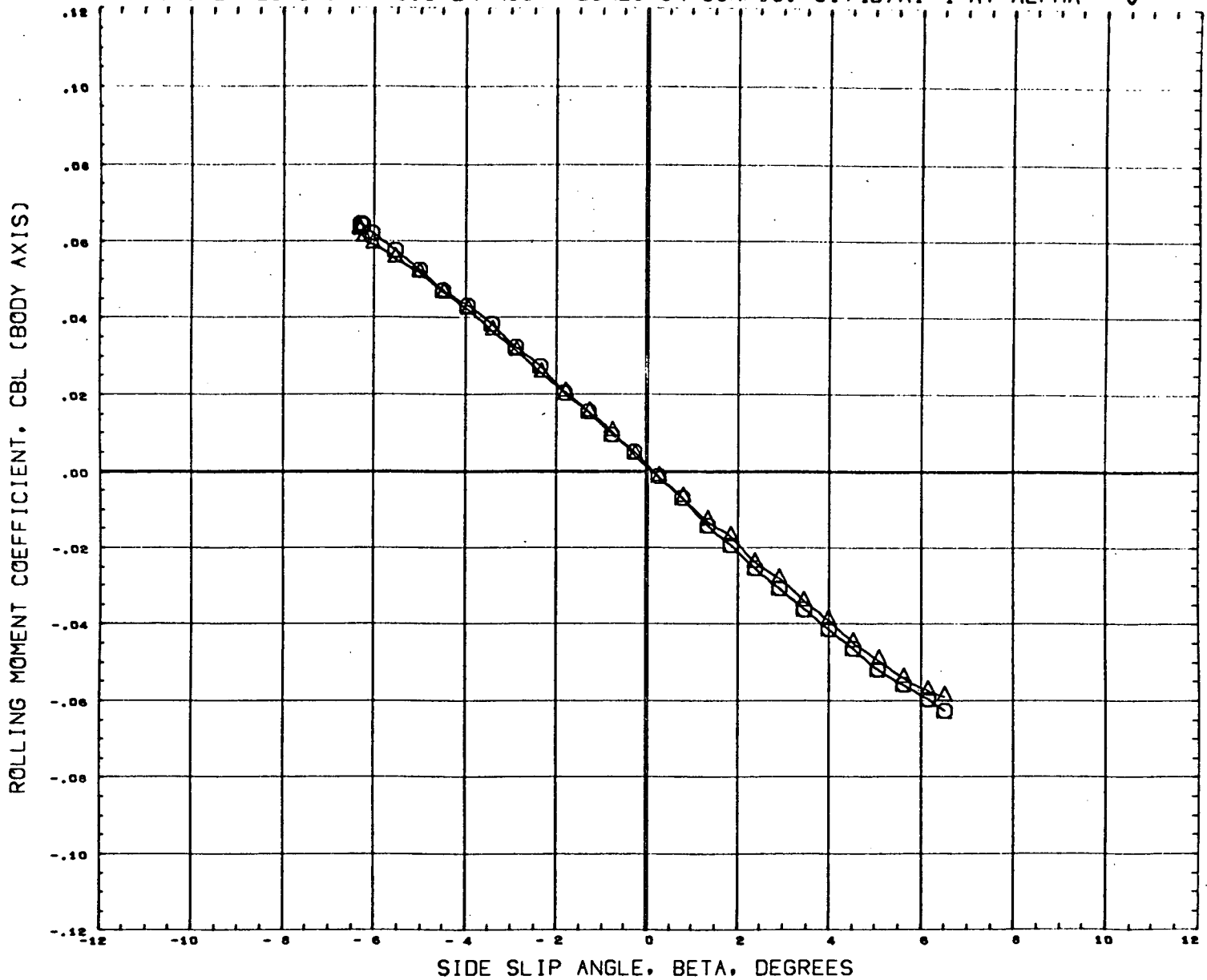


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7573)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7575)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LAT-DIR. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT ALPHA = 0

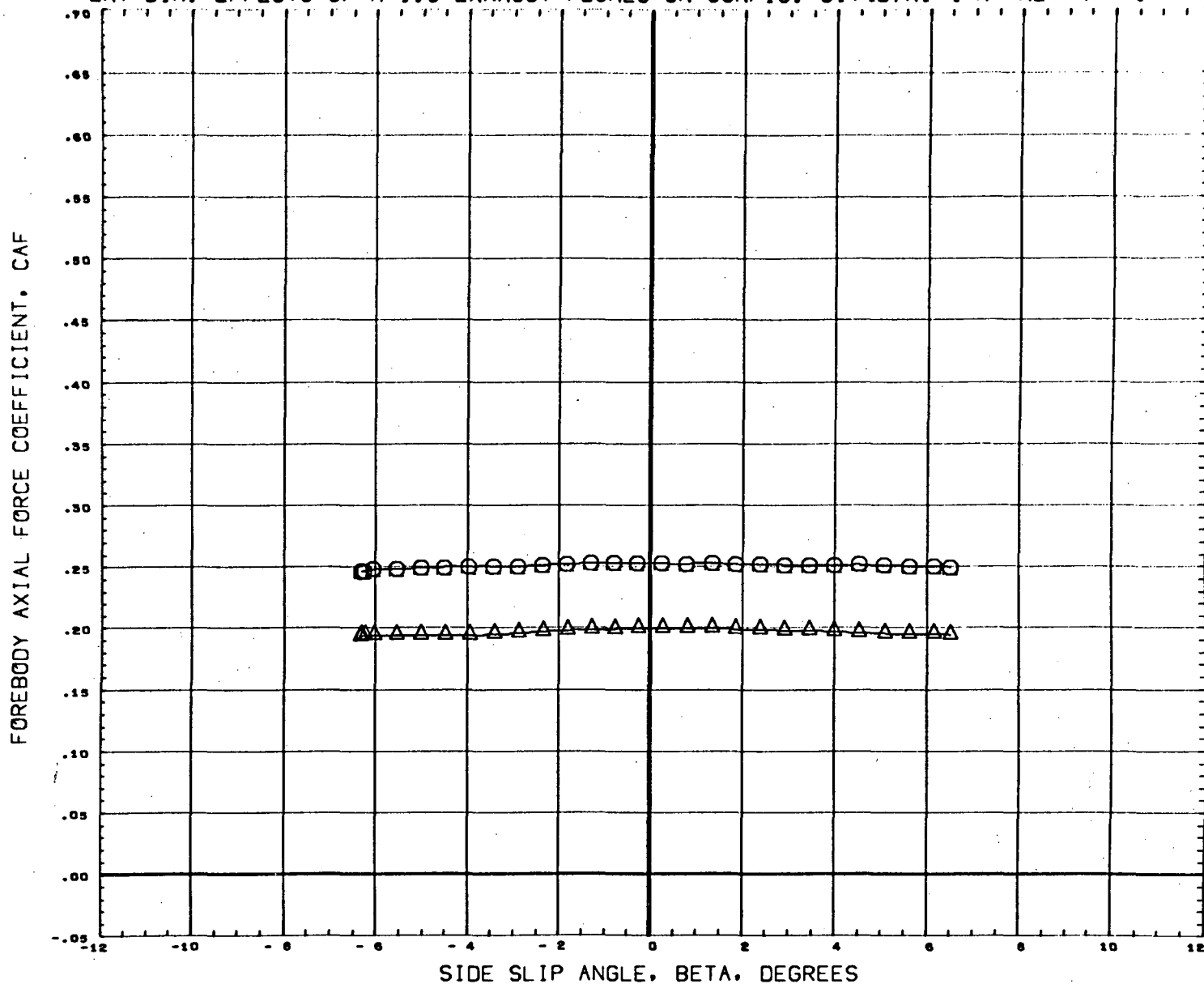


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7573)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7575)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT ALPHA = 0

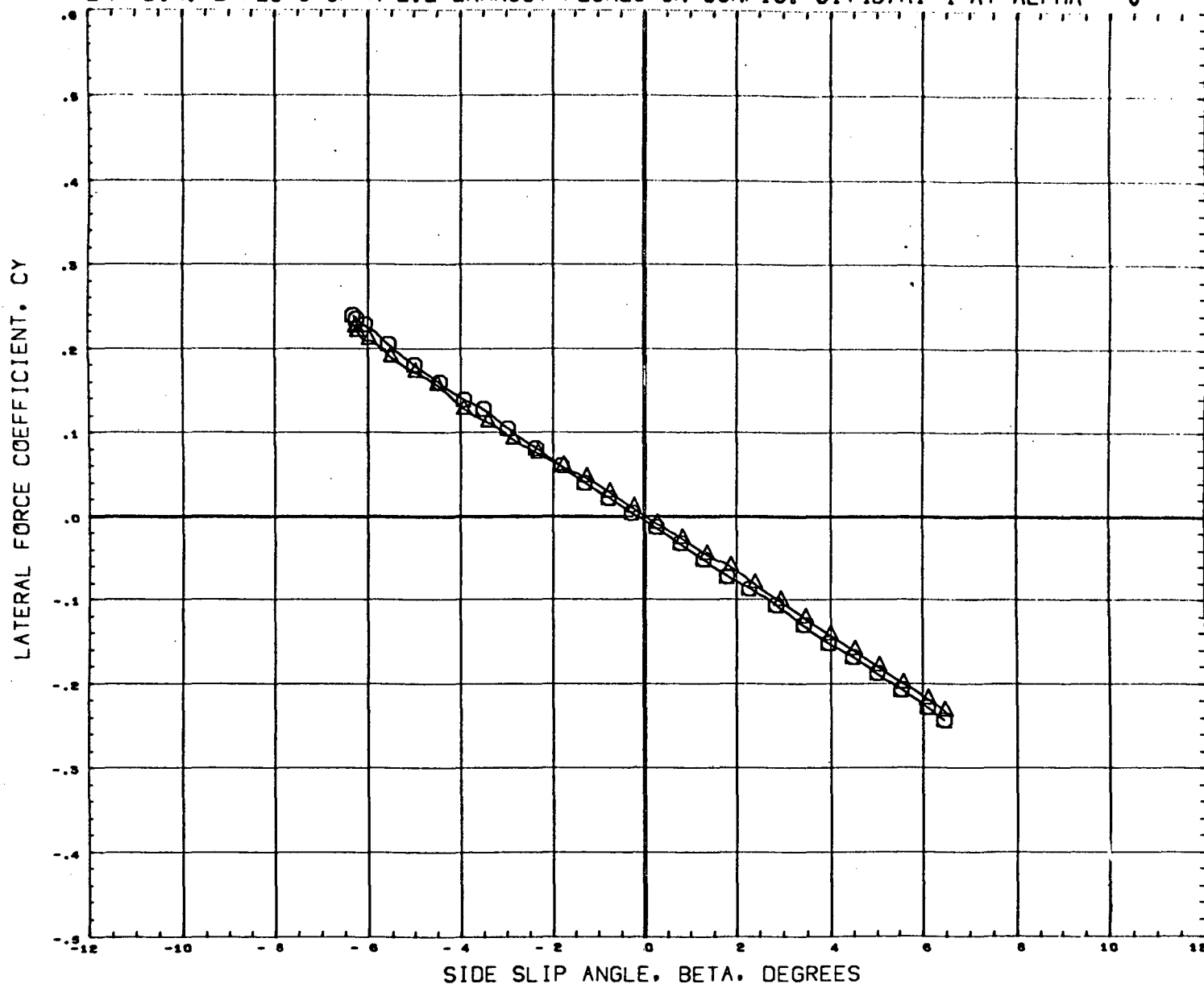


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7573)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7575)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LAT-DIR. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT ALPHA = 0

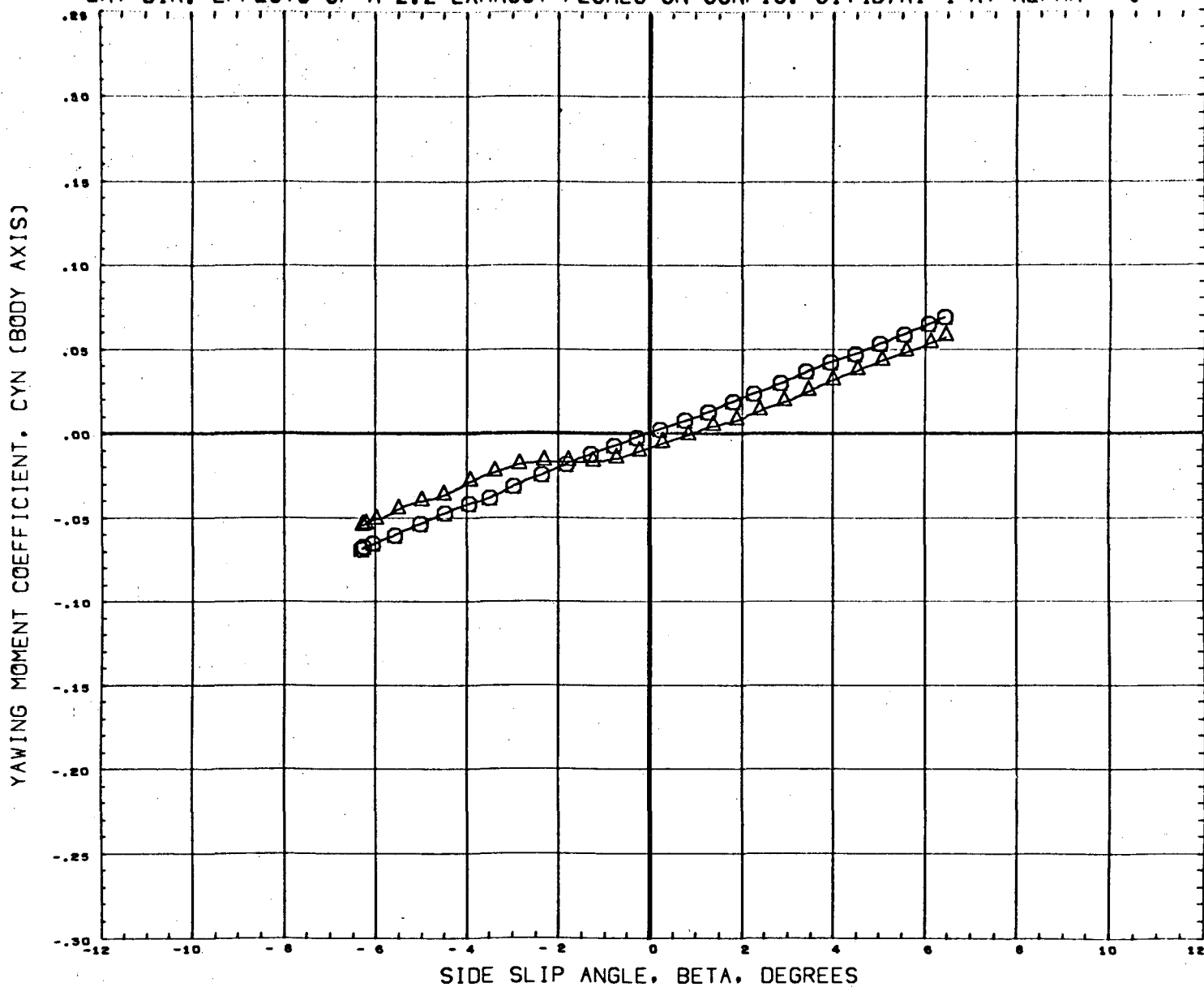


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7573)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7581)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	997.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# LAT-DIR. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT ALPHA = 0



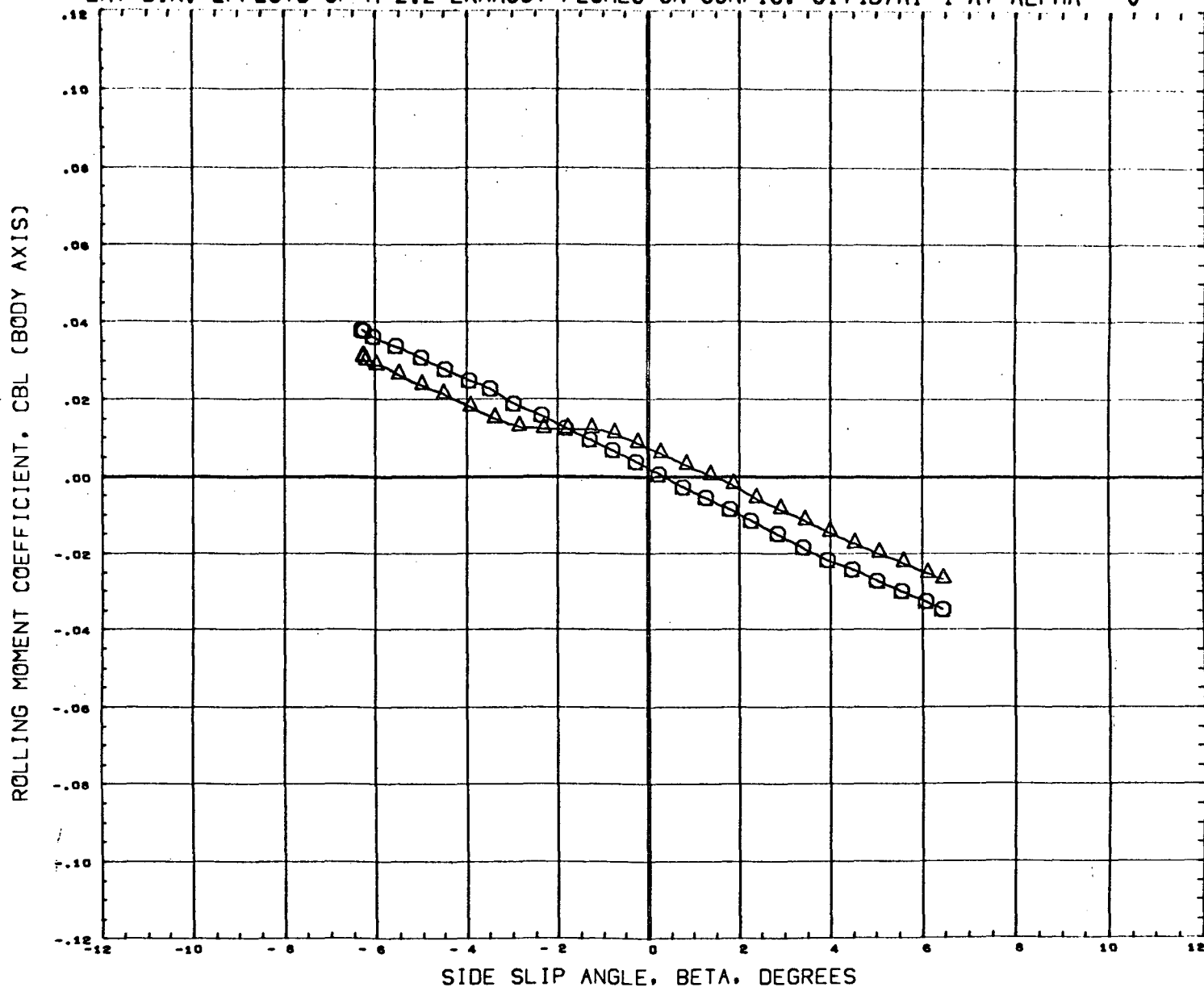
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7573)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7581)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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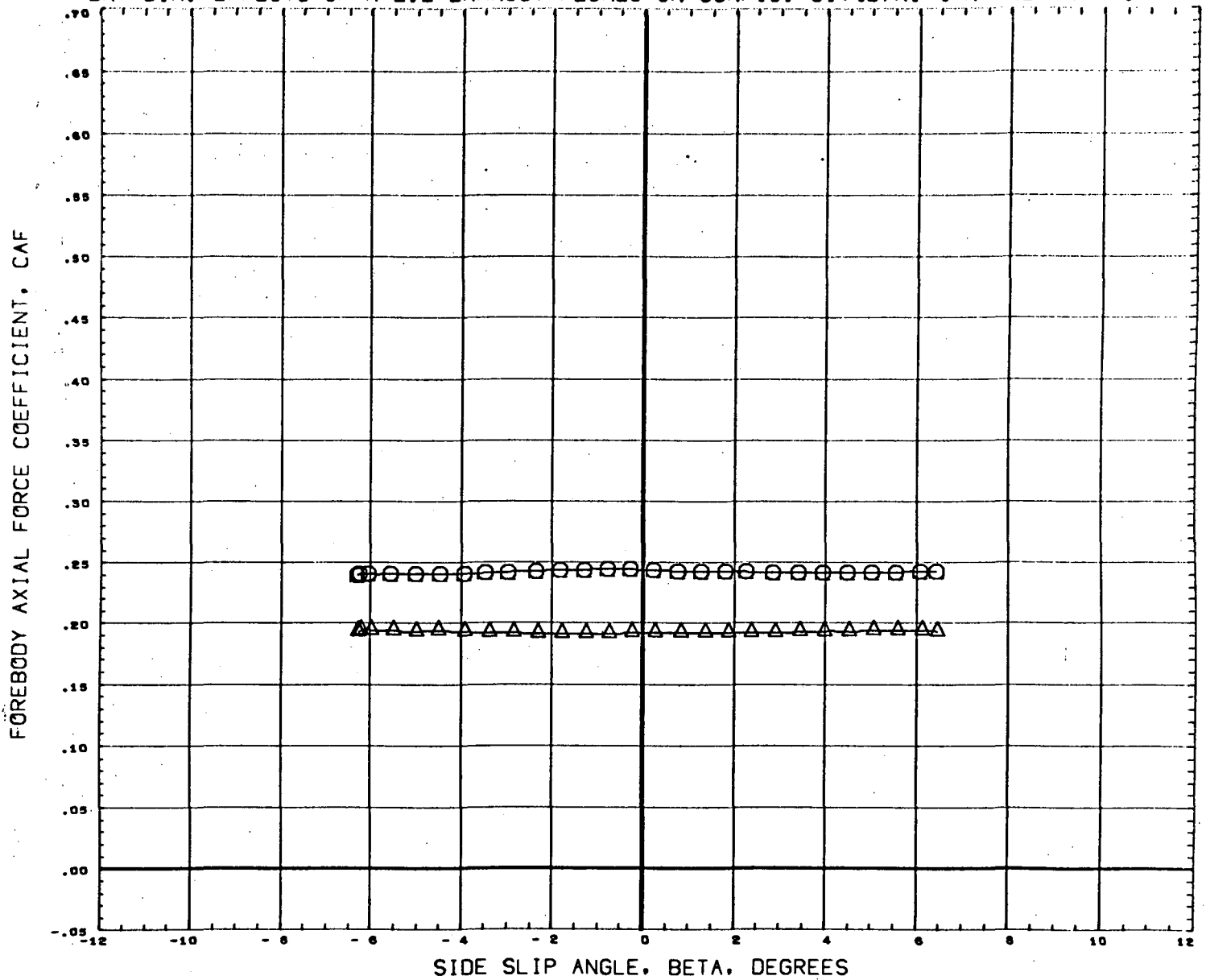
# LAT-DIR. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT ALPHA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7573)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7581)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2,2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

# LAT-DIR. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01T4B7A1-4 AT ALPHA = 0

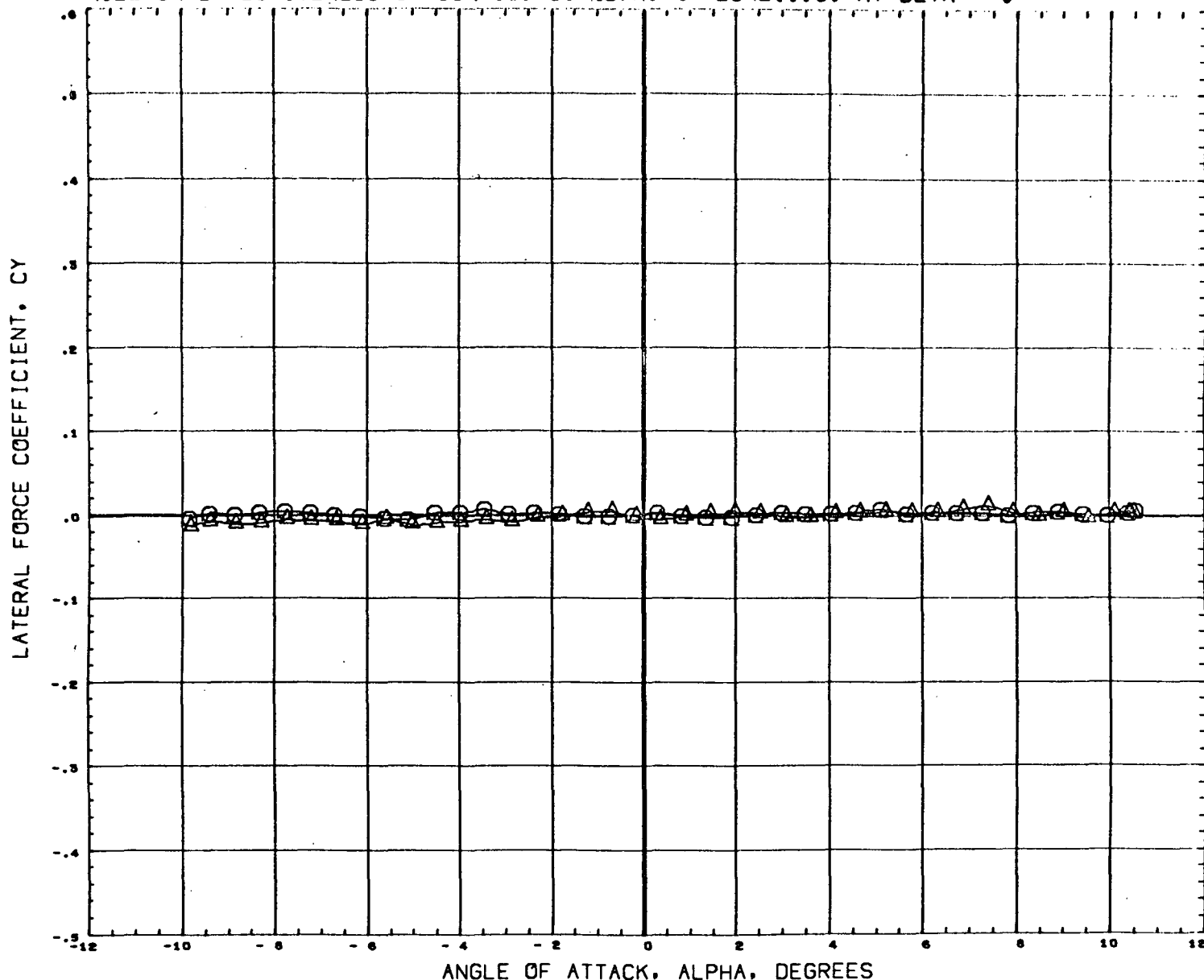


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7573)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.5040 SQ.FT.
(RD7581)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	LREF	809.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# AILERON EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT BETA = 0



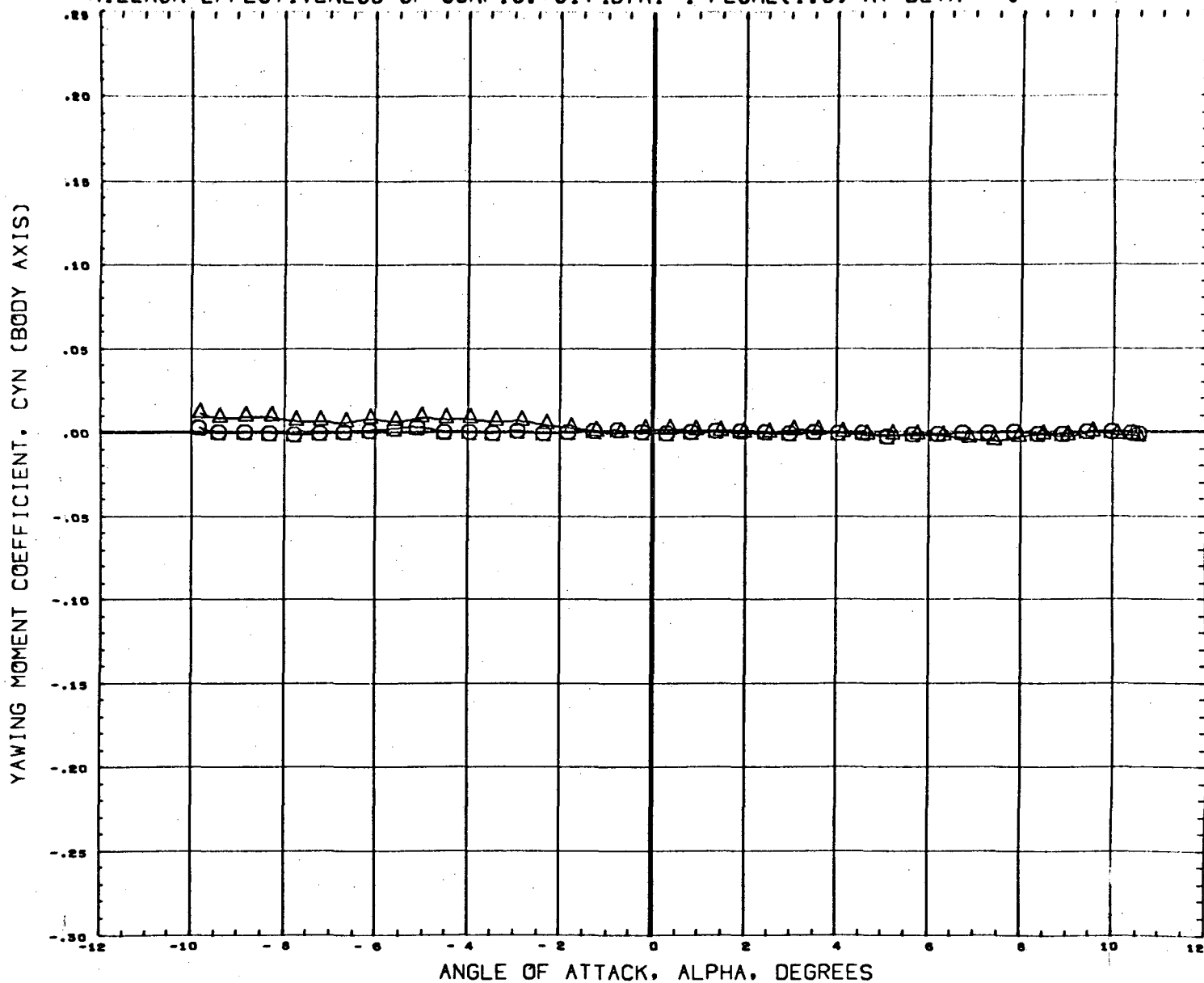
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7574)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7576)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	357.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# AILERON EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT BETA = 0



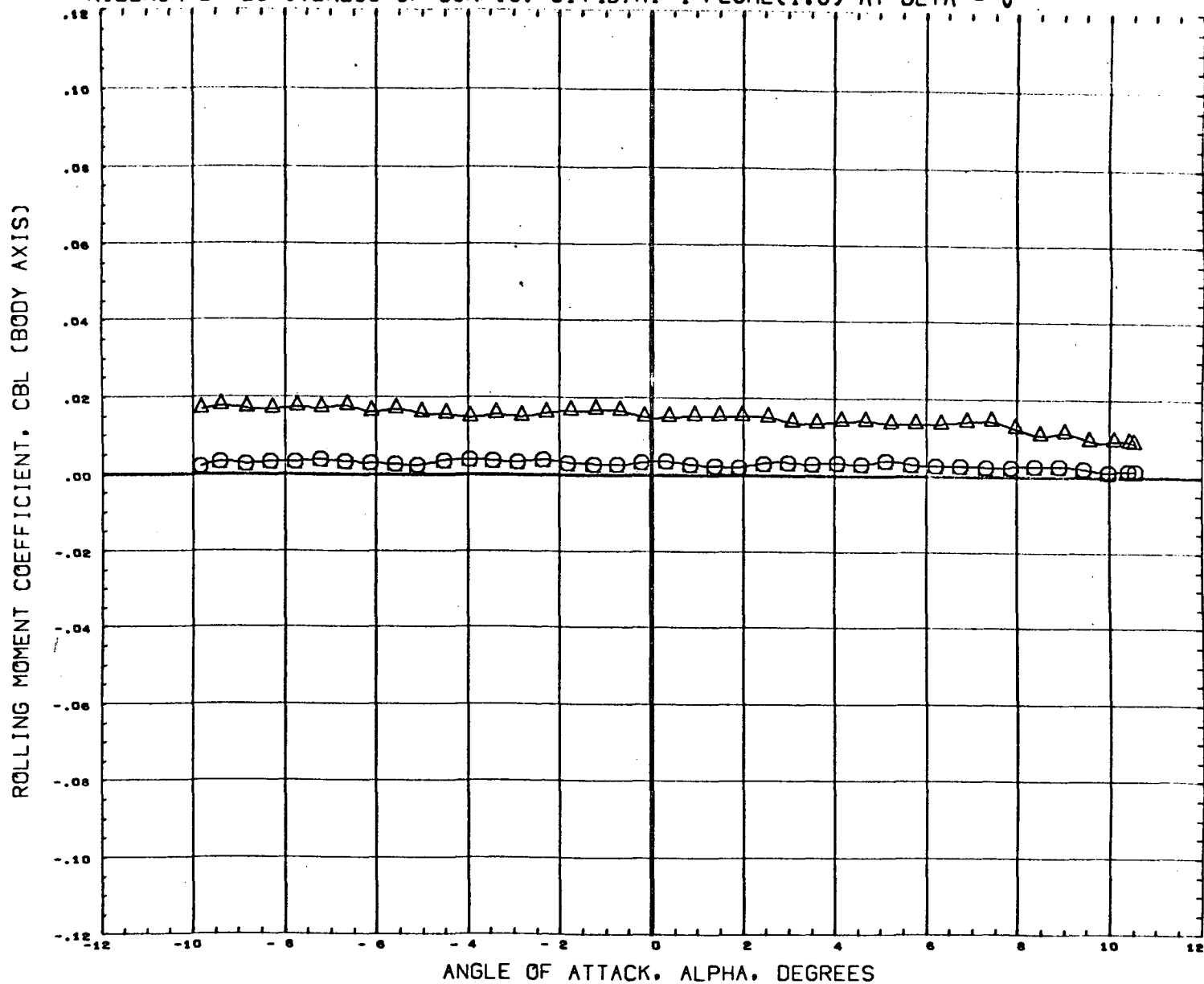
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7574)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7576)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

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# AILERON EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT BETA = 0

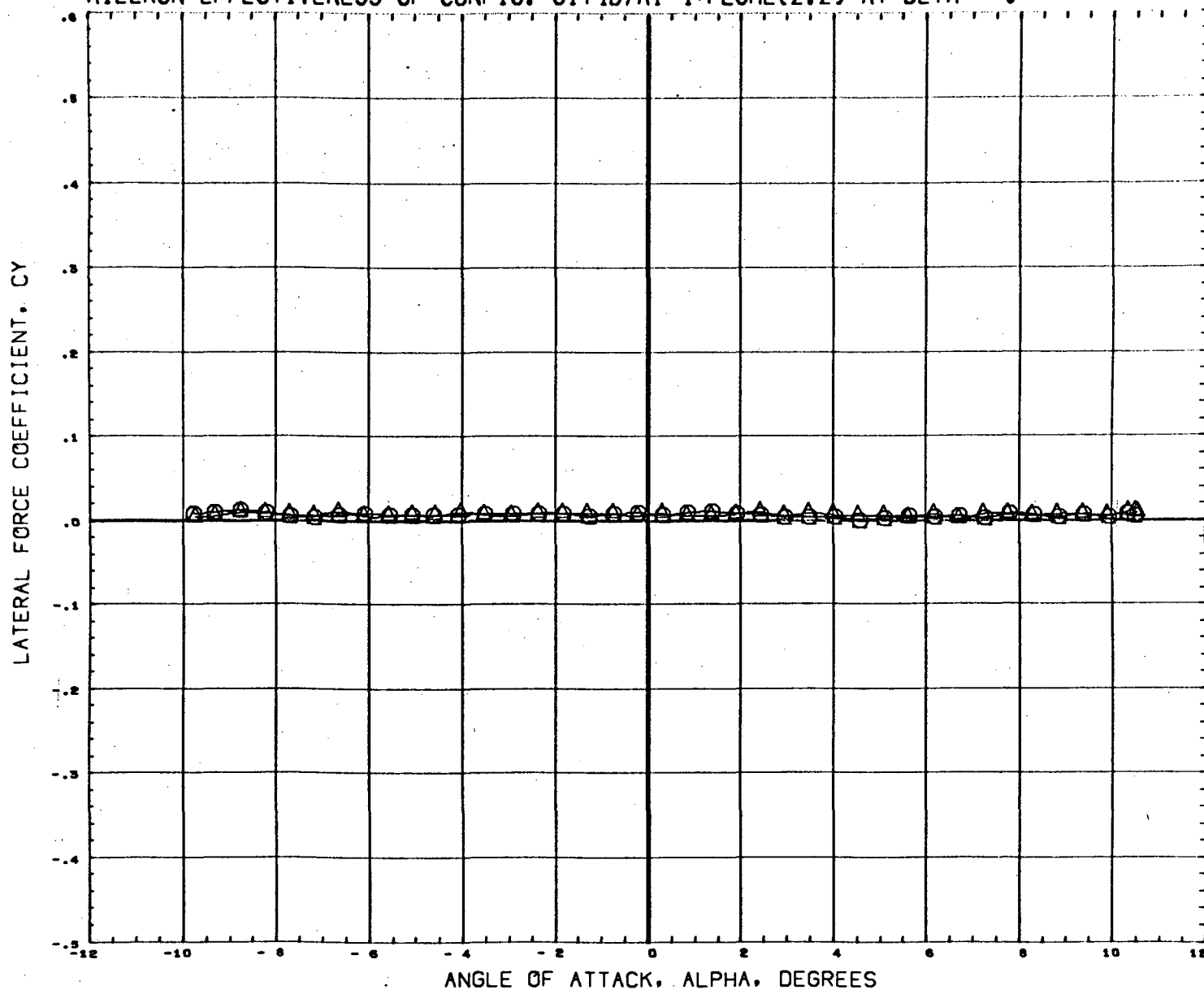


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7576)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# AILERON EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT BETA = 0

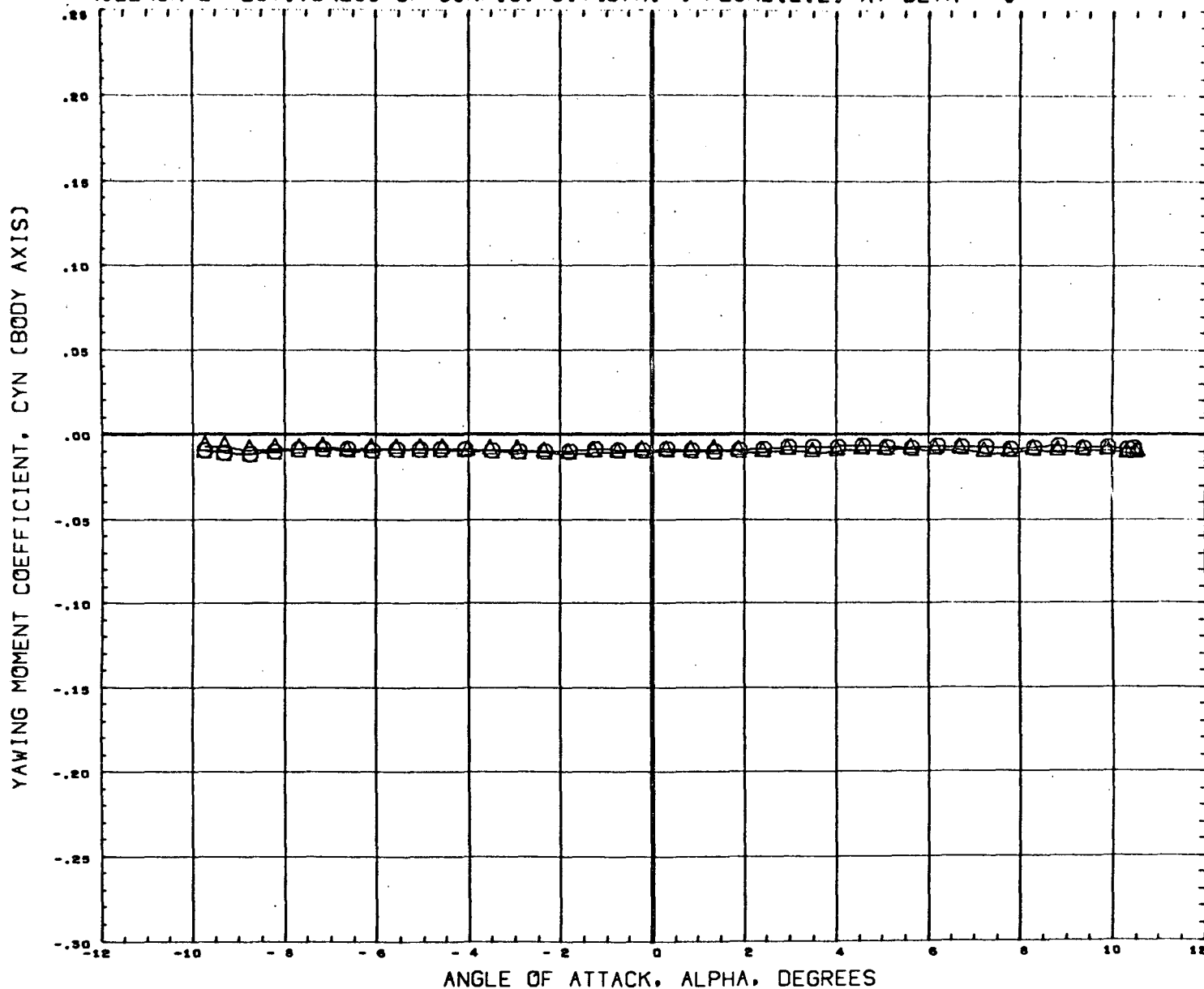


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7582)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	537.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# AILERON EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT BETA = 0

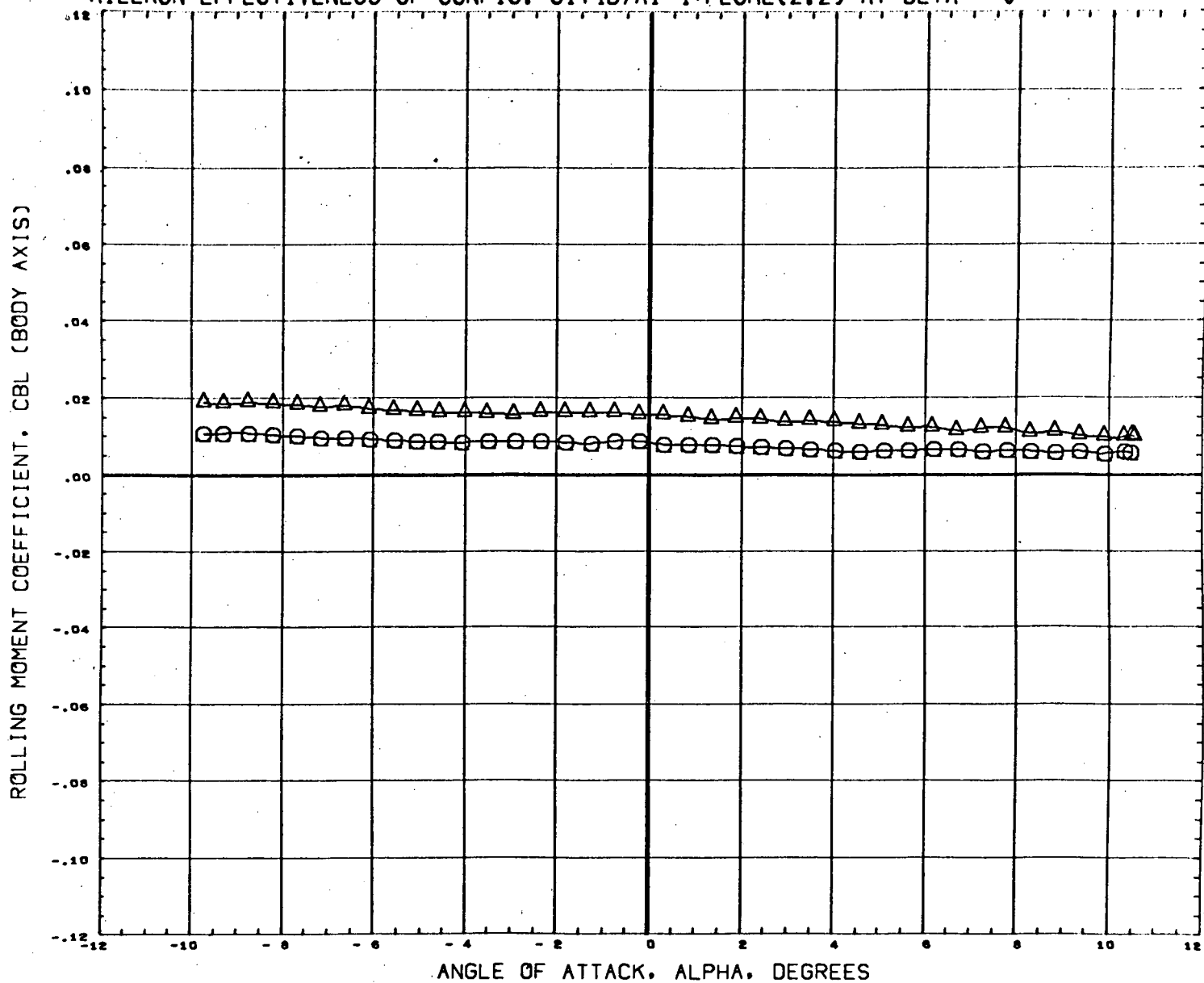


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7580)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7582)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# AILERON EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT BETA = 0

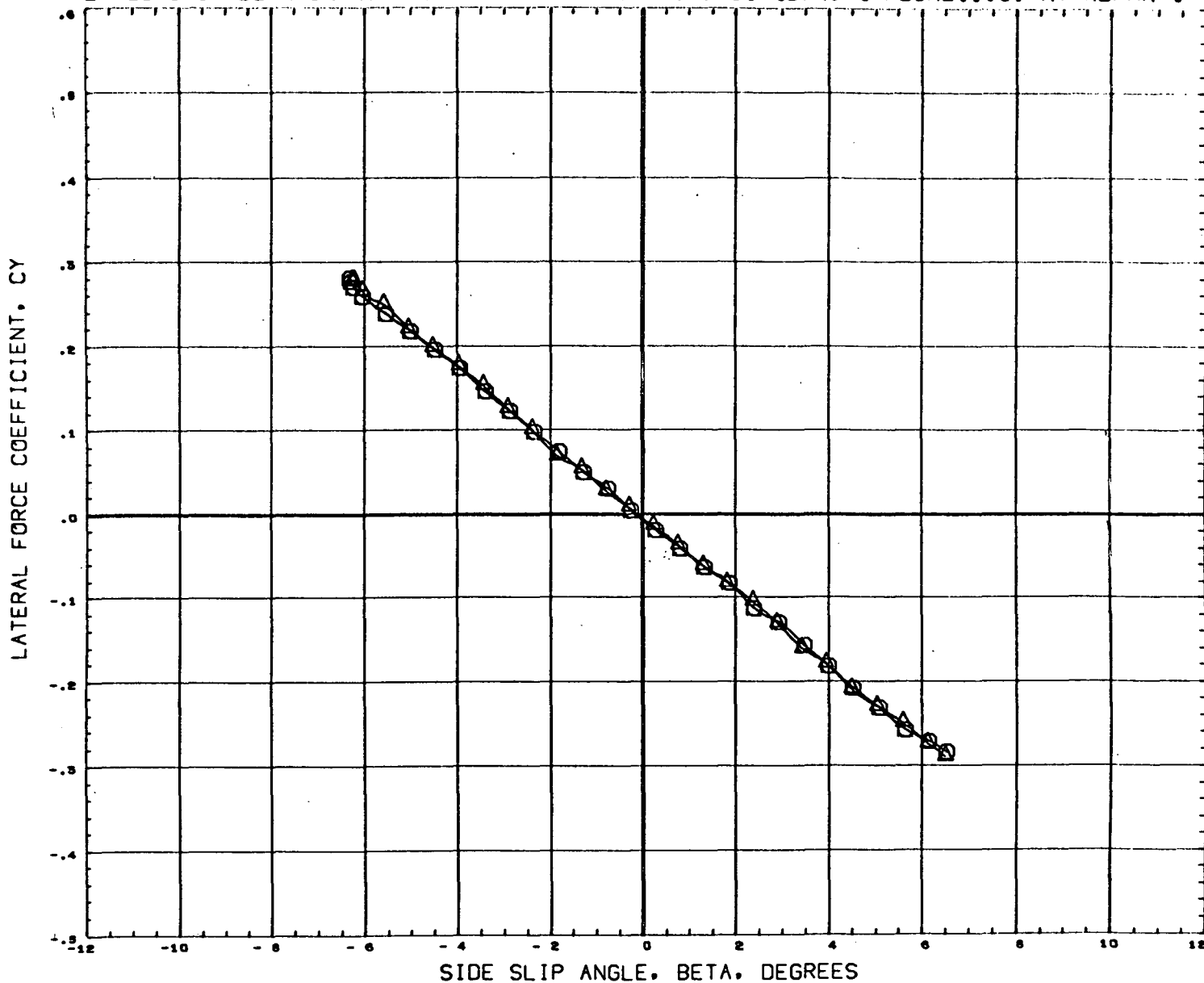


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(RD7582)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF BETA ON AILERON CONTROL OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT ALPHA=0

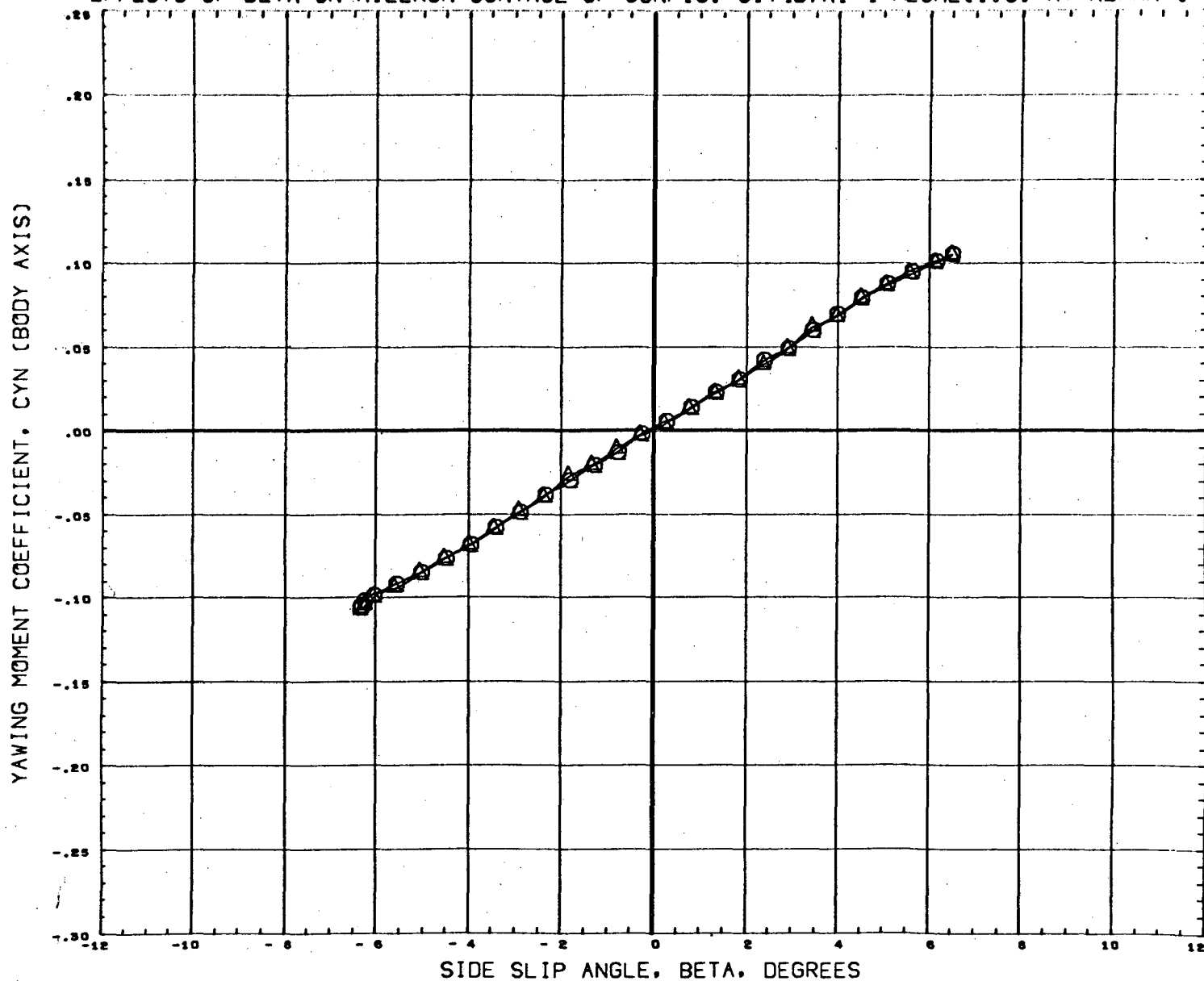


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7575)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7577)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF BETA ON AILERON CONTROL OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT ALPHA=0

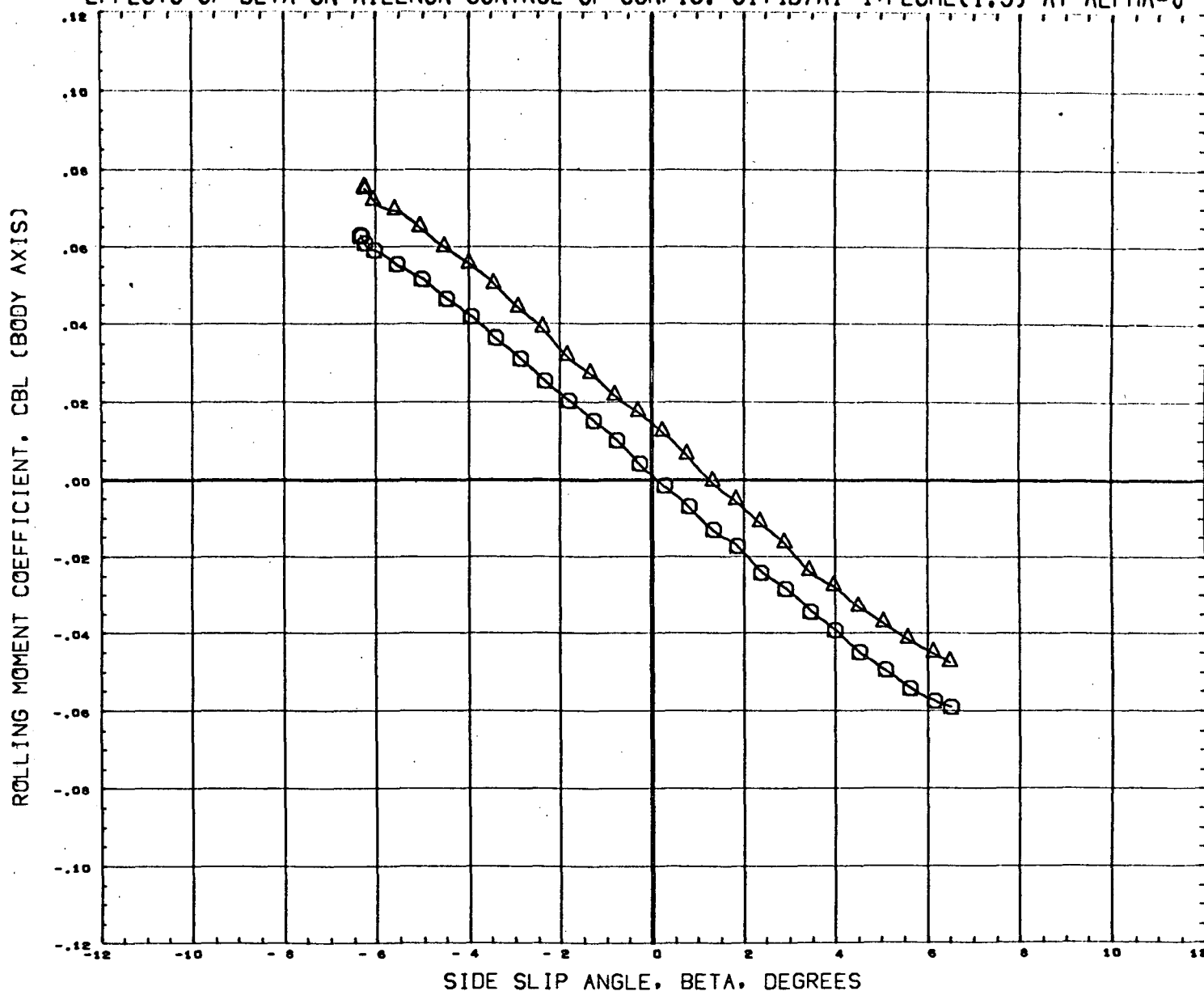


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7575)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7577)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	20.000	0.000	LREF	609.3004 IN.
						BREF	882.0004 IN.
						XMRR	557.0004 IN.
						YMRR	0.0000 IN.
						ZMRR	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF BETA ON AILERON CONTROL OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT ALPHA=0



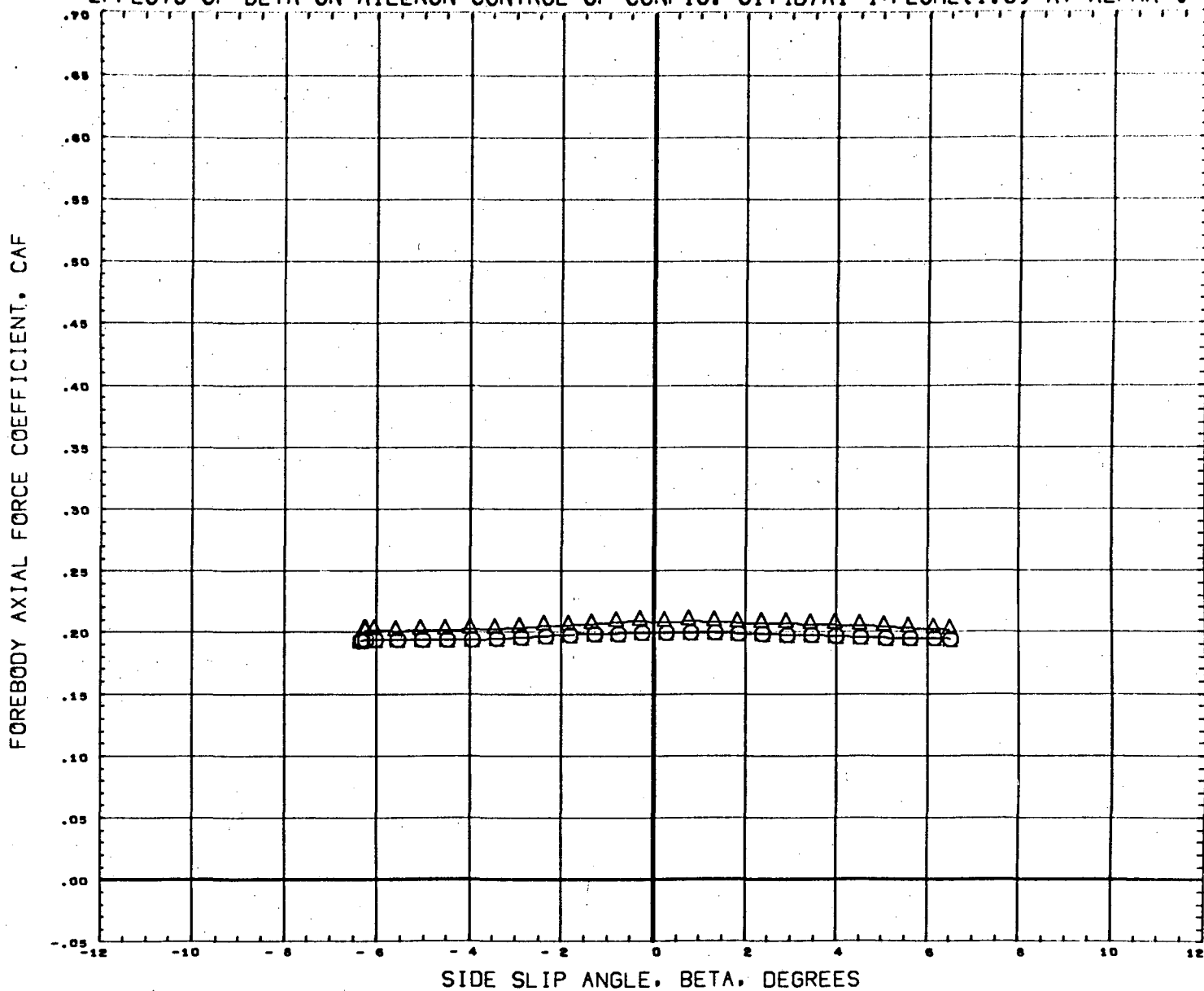
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7575)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7577)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF BETA ON AILERON CONTROL OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT ALPHA=0

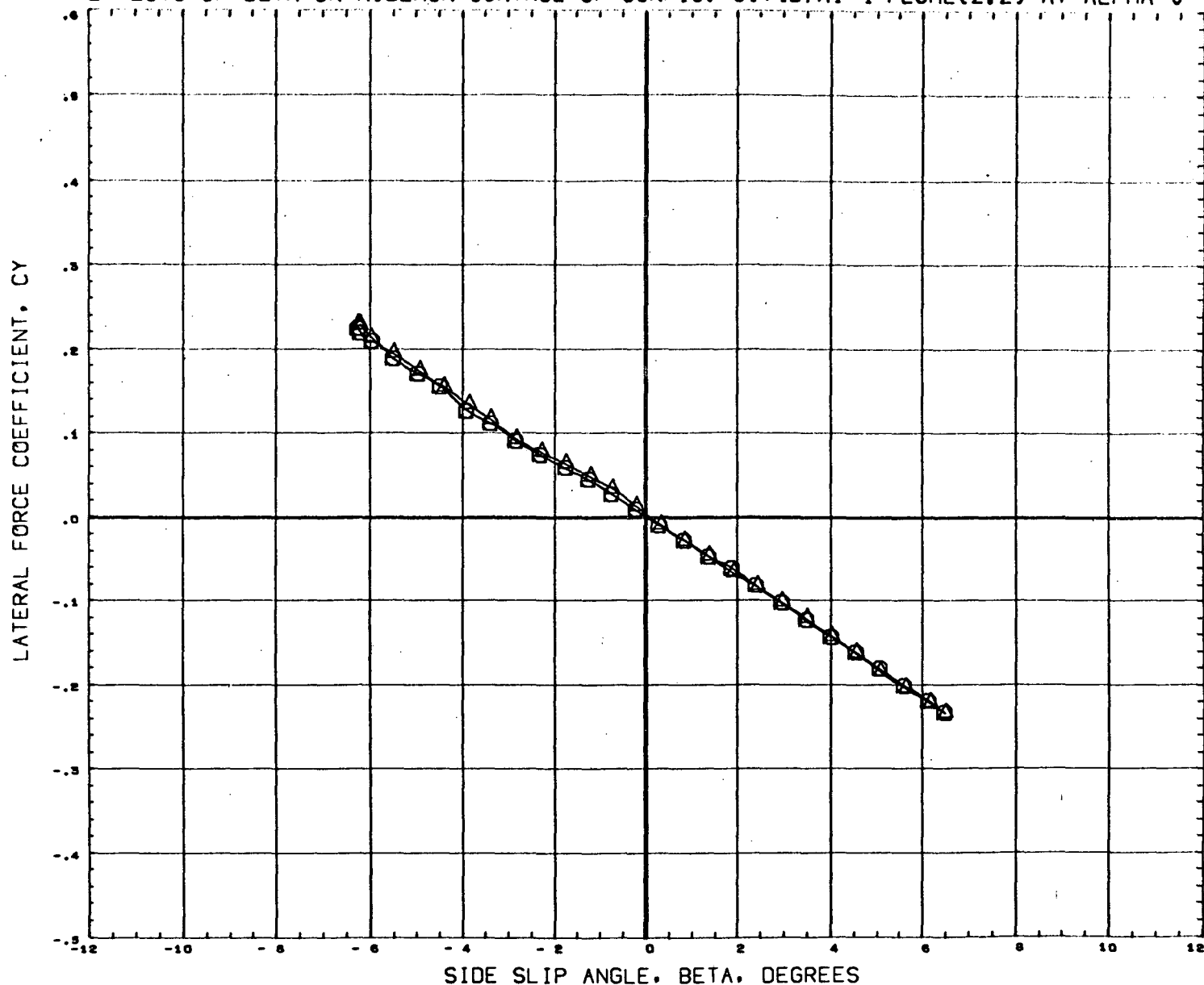


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7575)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7577)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRR	557.0004 IN.
						YMRR	0.0000 IN.
						ZMRR	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF BETA ON AILERON CONTROL OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT ALPHA=0

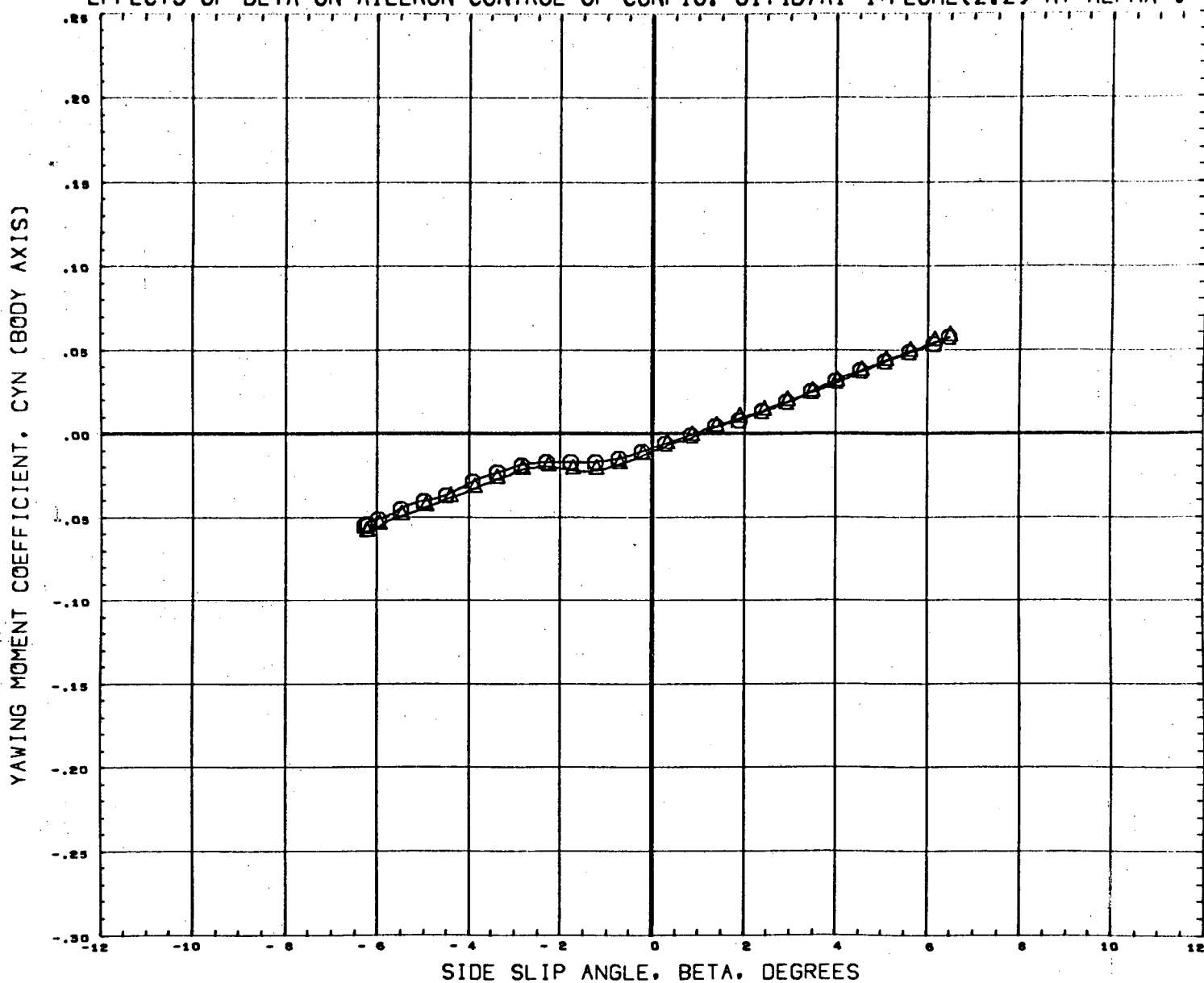


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7581)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7583)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME (2.2)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF BETA ON AILERON CONTROL OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT ALPHA=0

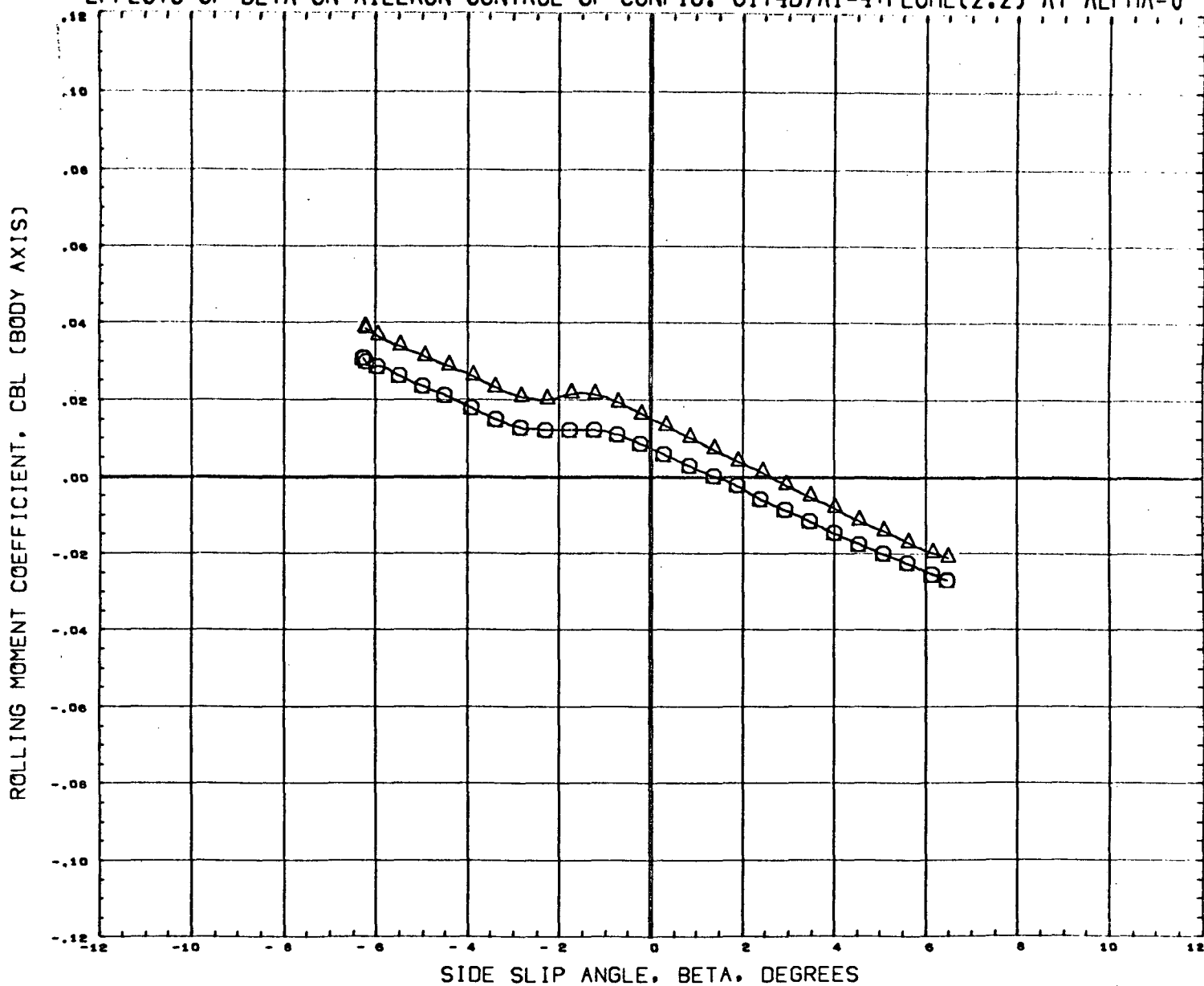


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7581)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7583)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF BETA ON AILERON CONTROL OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT ALPHA=0

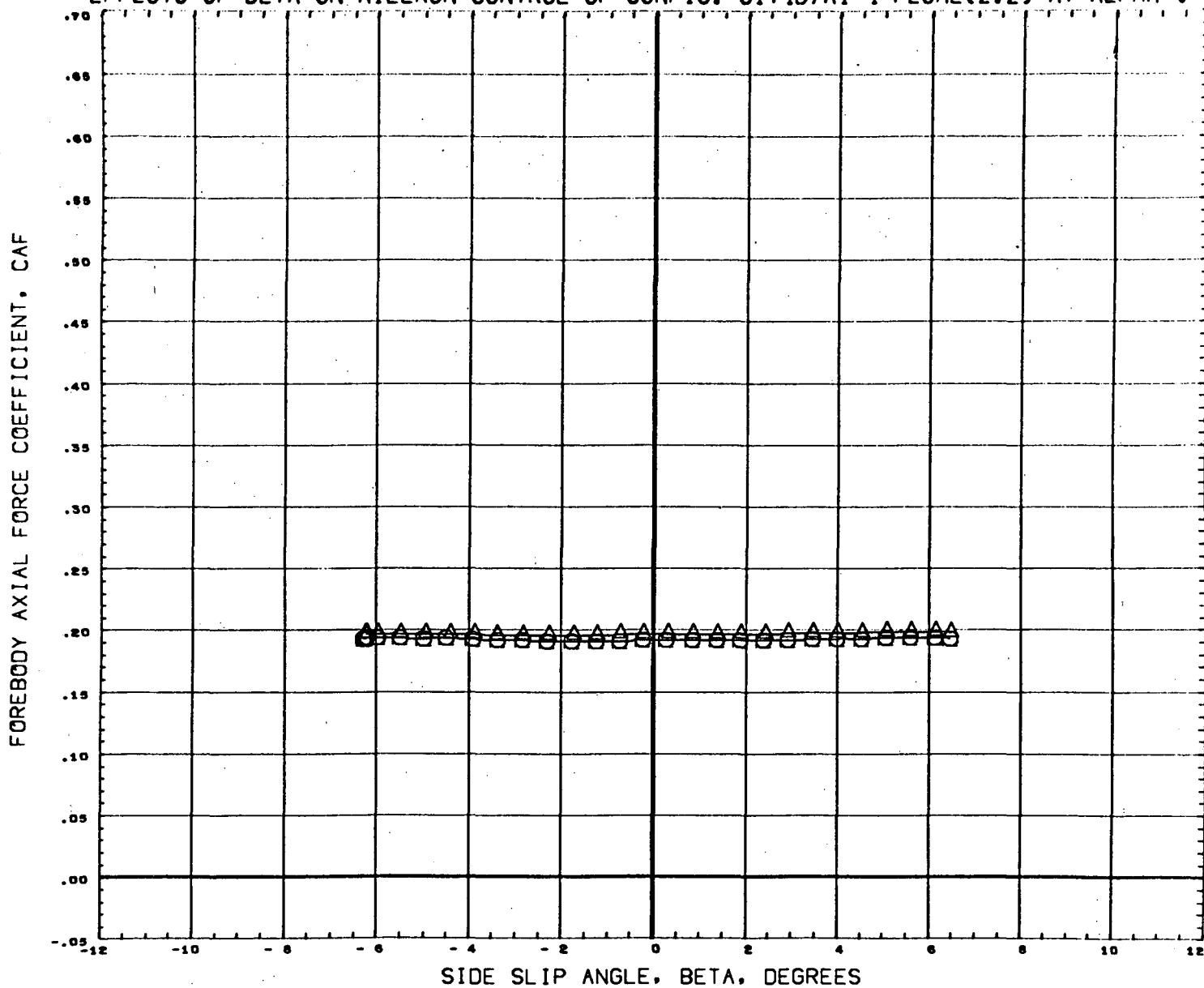


DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(RD7581)	○	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7583)	△	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
							BREF	882.0004	IN.
							XMRF	557.0004	IN.
							YMRF	0.0000	IN.
							ZMRF	200.0004	IN.
							SCALE	0.0060	

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# EFFECTS OF BETA ON AILERON CONTROL OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT ALPHA=0

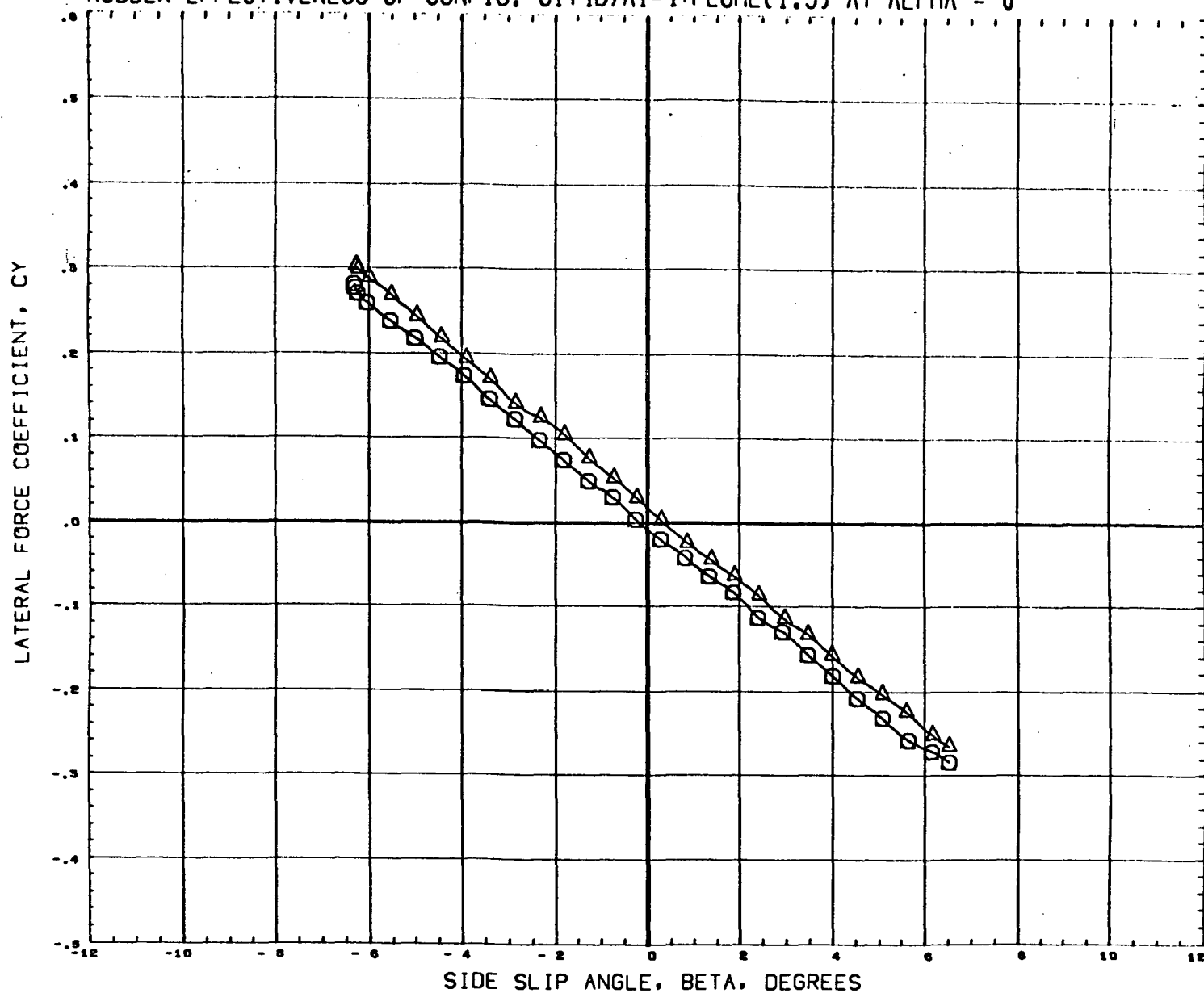


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7581)	MDAC S-222 COMPOSITE(T-C6) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7583)	MDAC S-222 COMPOSITE(T-C6) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMPP	557.0004 IN.
						YMPP	0.0000 IN.
						ZMPP	200.0004 IN.
						SCALE	0.0060

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# RUDDER EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT ALPHA = 0

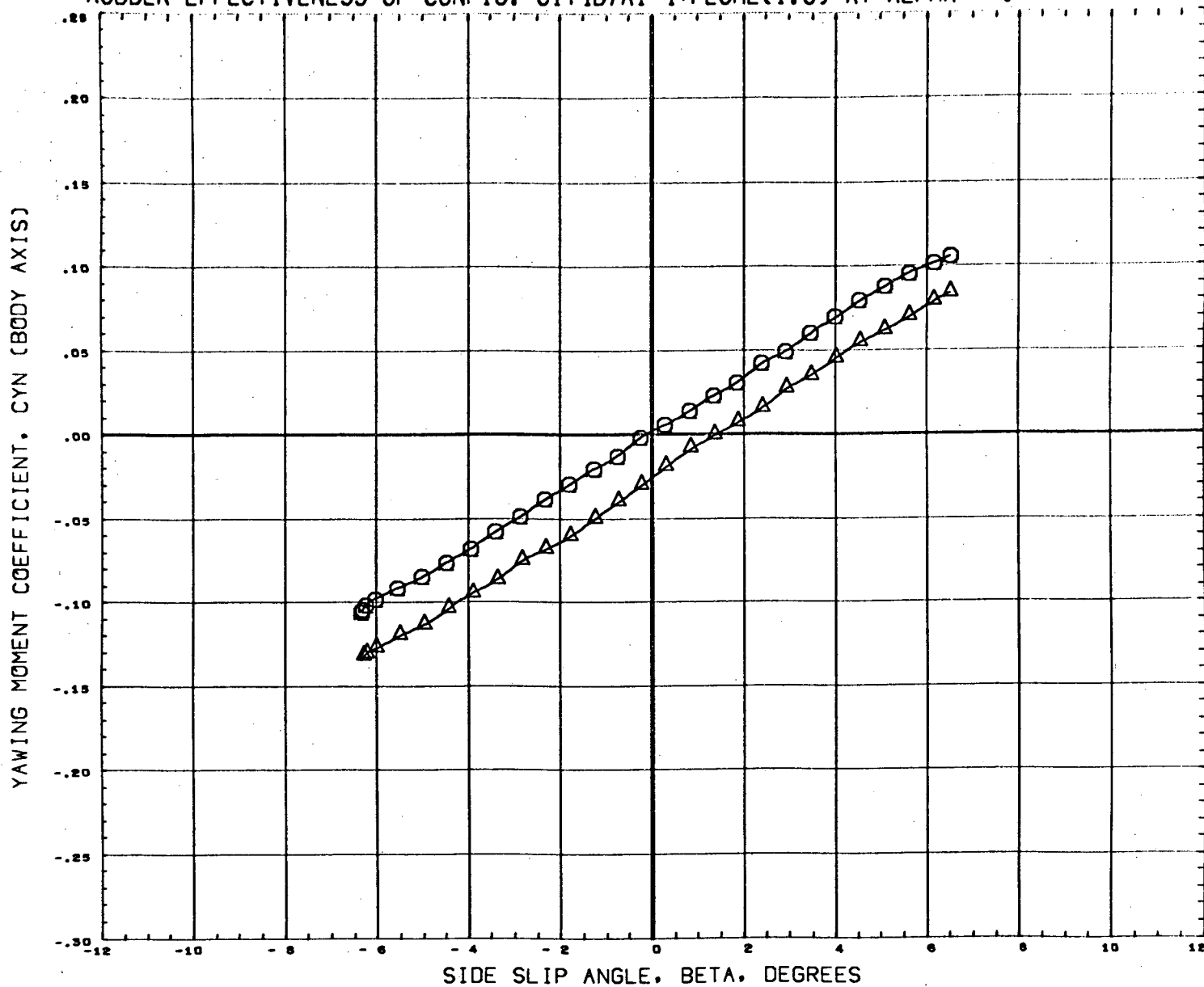


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7575)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7579)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	537.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# RUDDER EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT ALPHA = 0

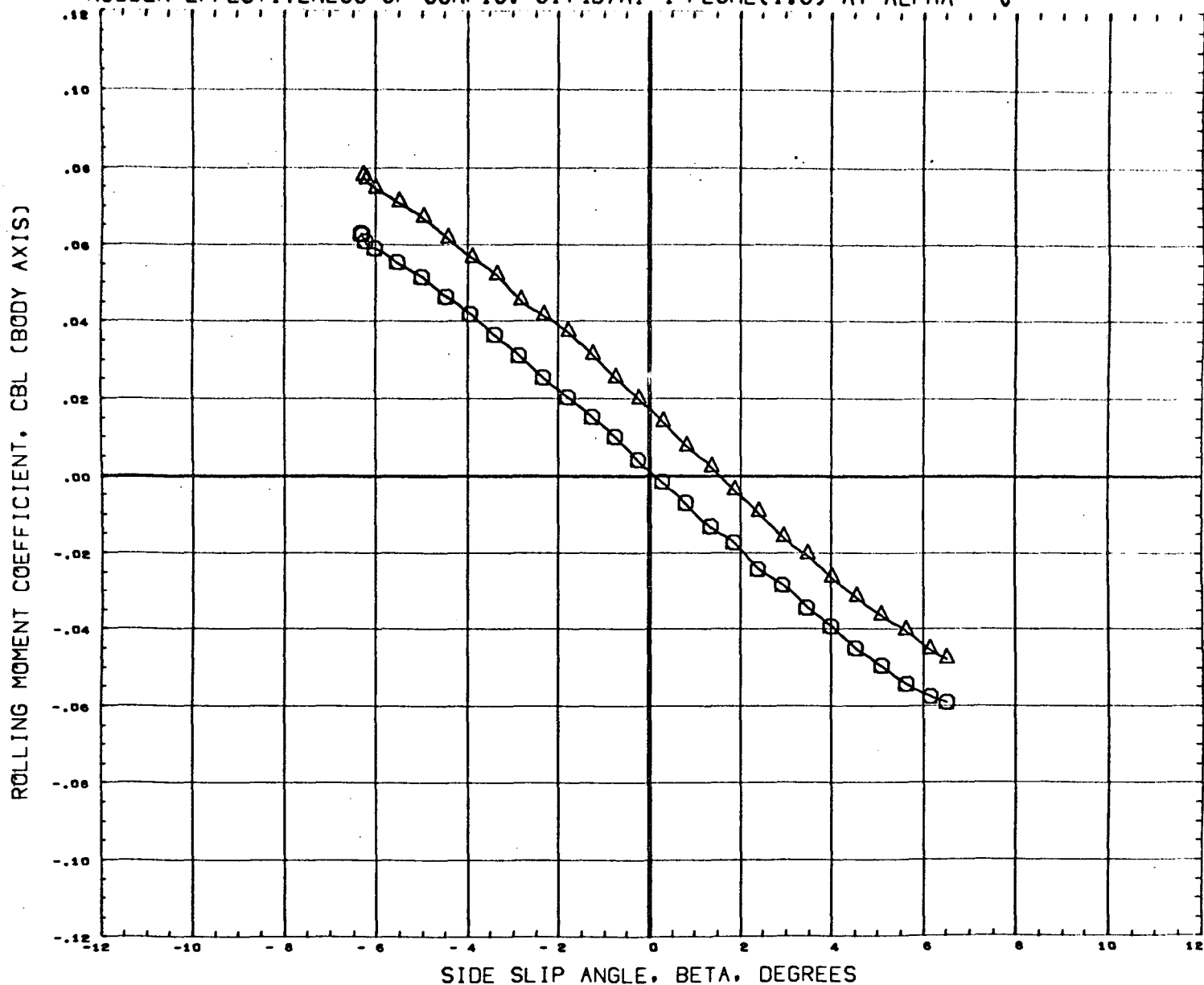


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7875)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7879)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# RUDDER EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT ALPHA = 0



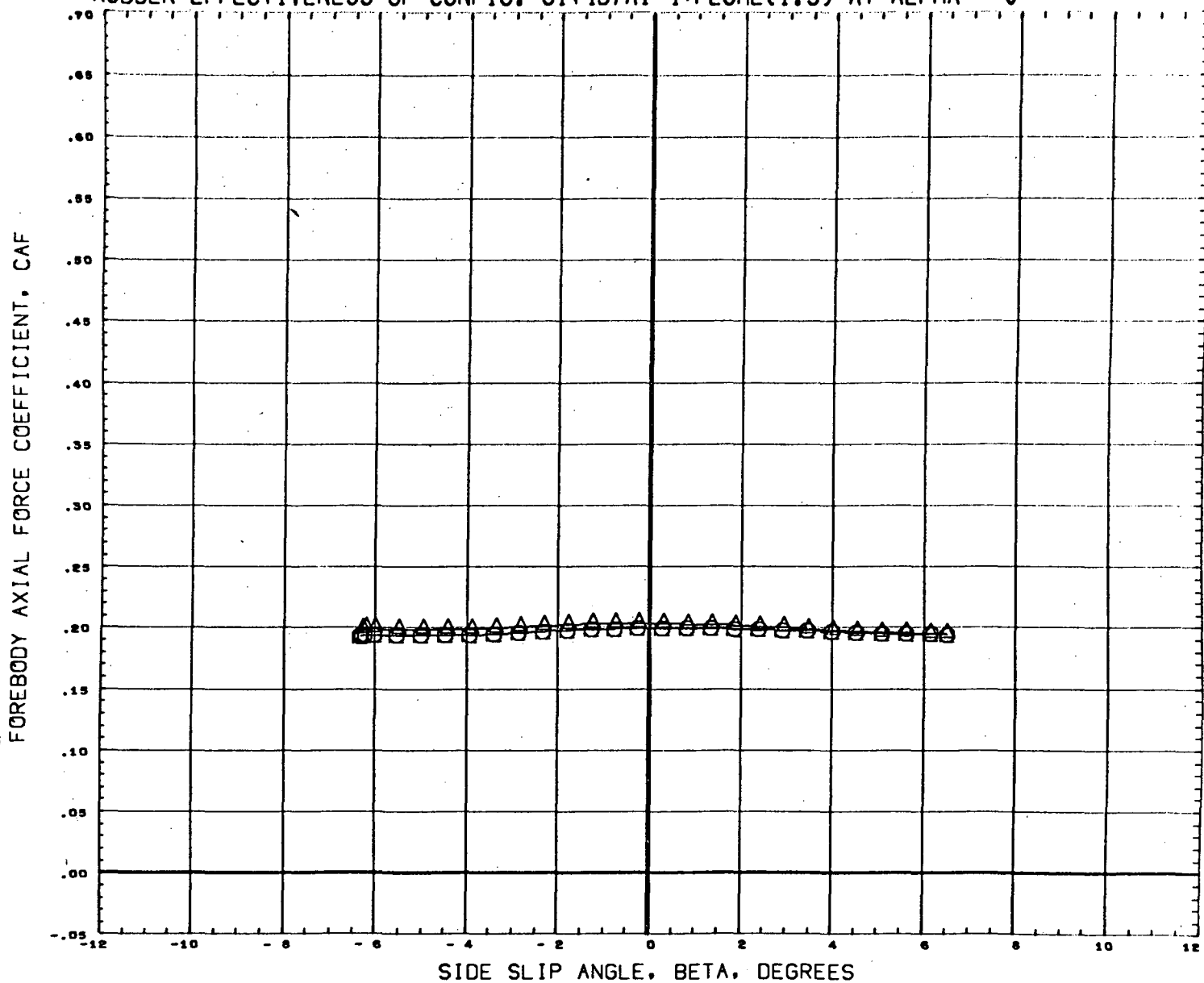
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7575)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7579)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# RUDDER EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT ALPHA = 0

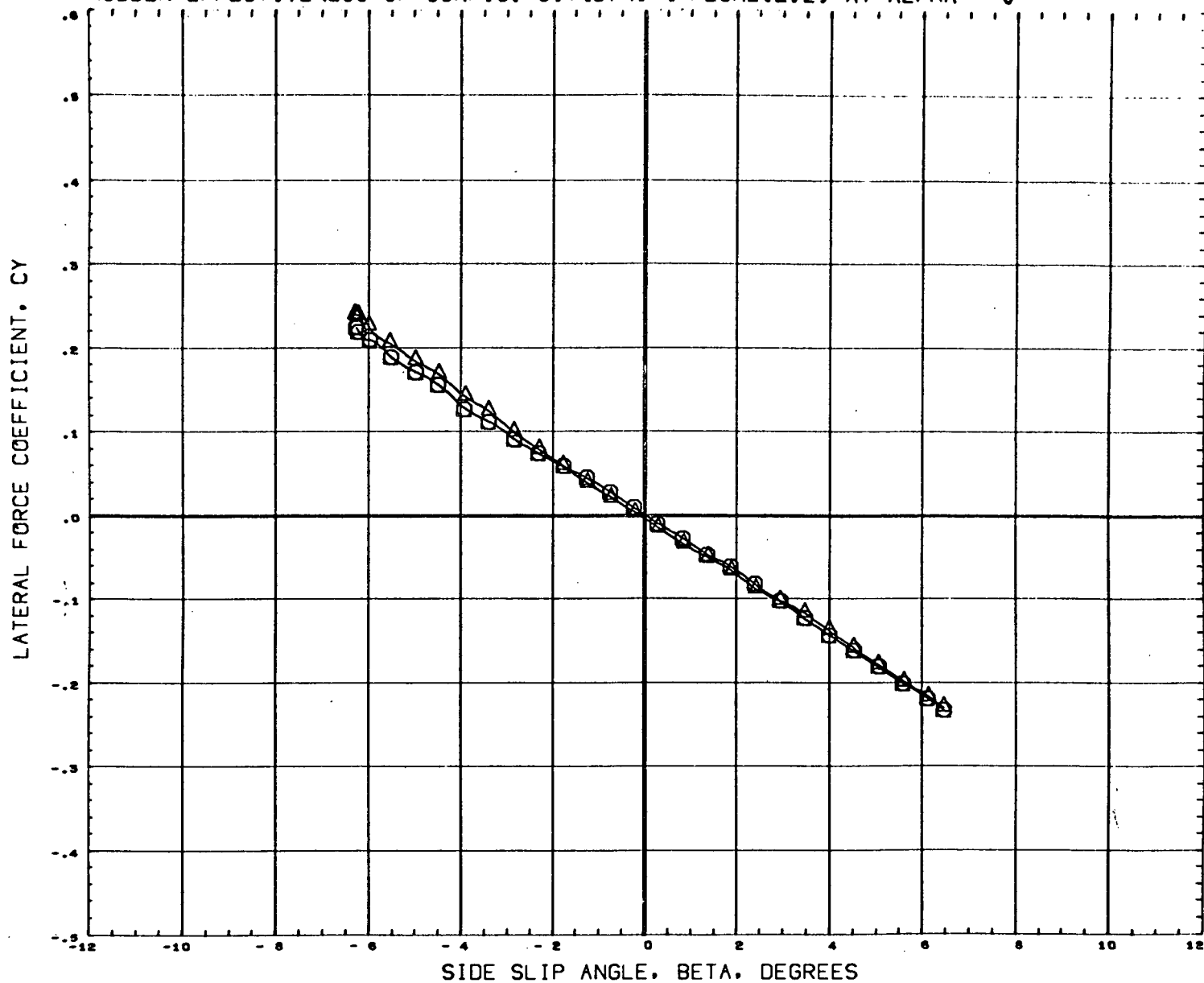


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7575)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7579)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# RUDDER EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT ALPHA = 0

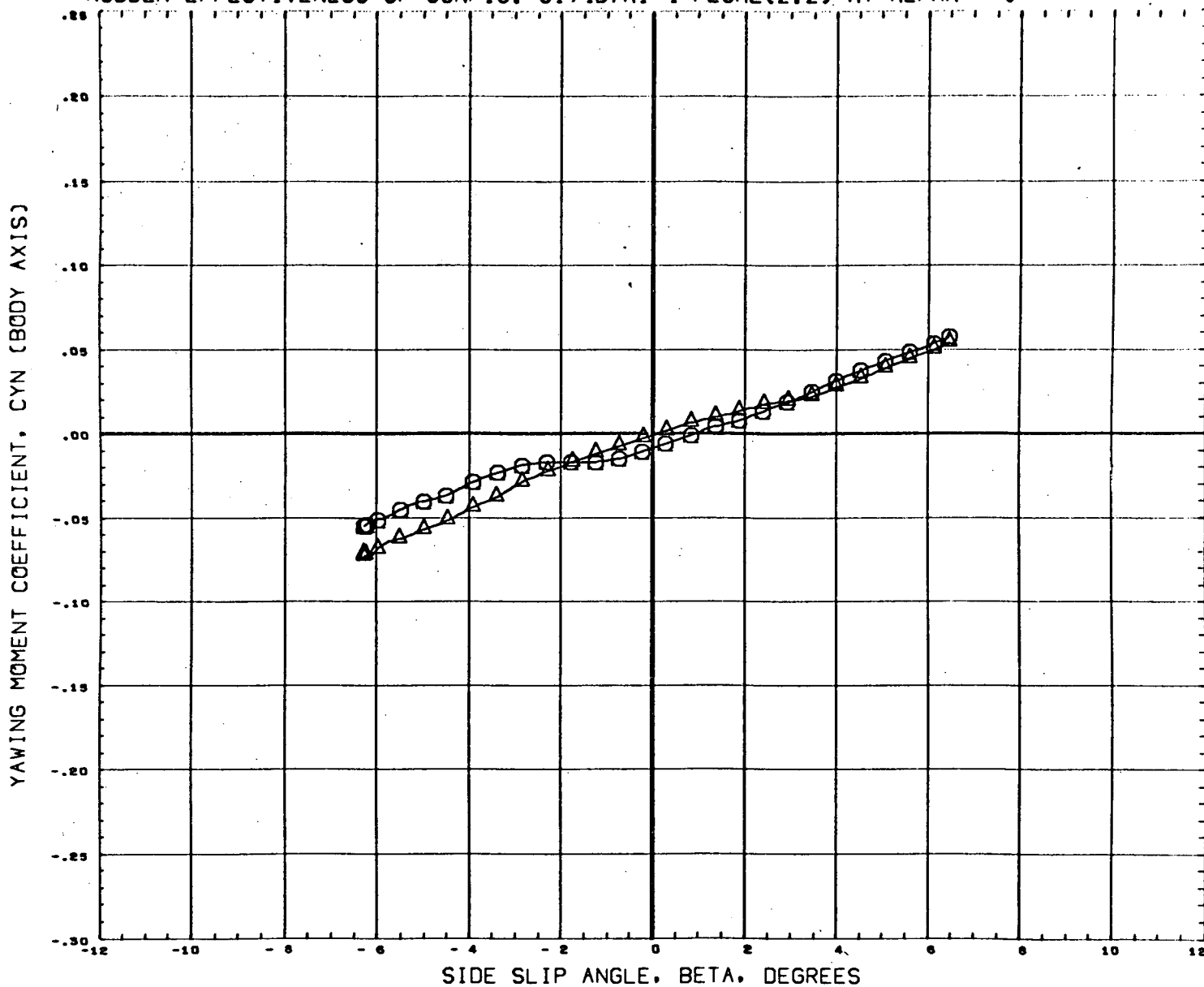


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7561)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7565)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	10.000	LREF	609.3004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# RUDDER EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT ALPHA = 0

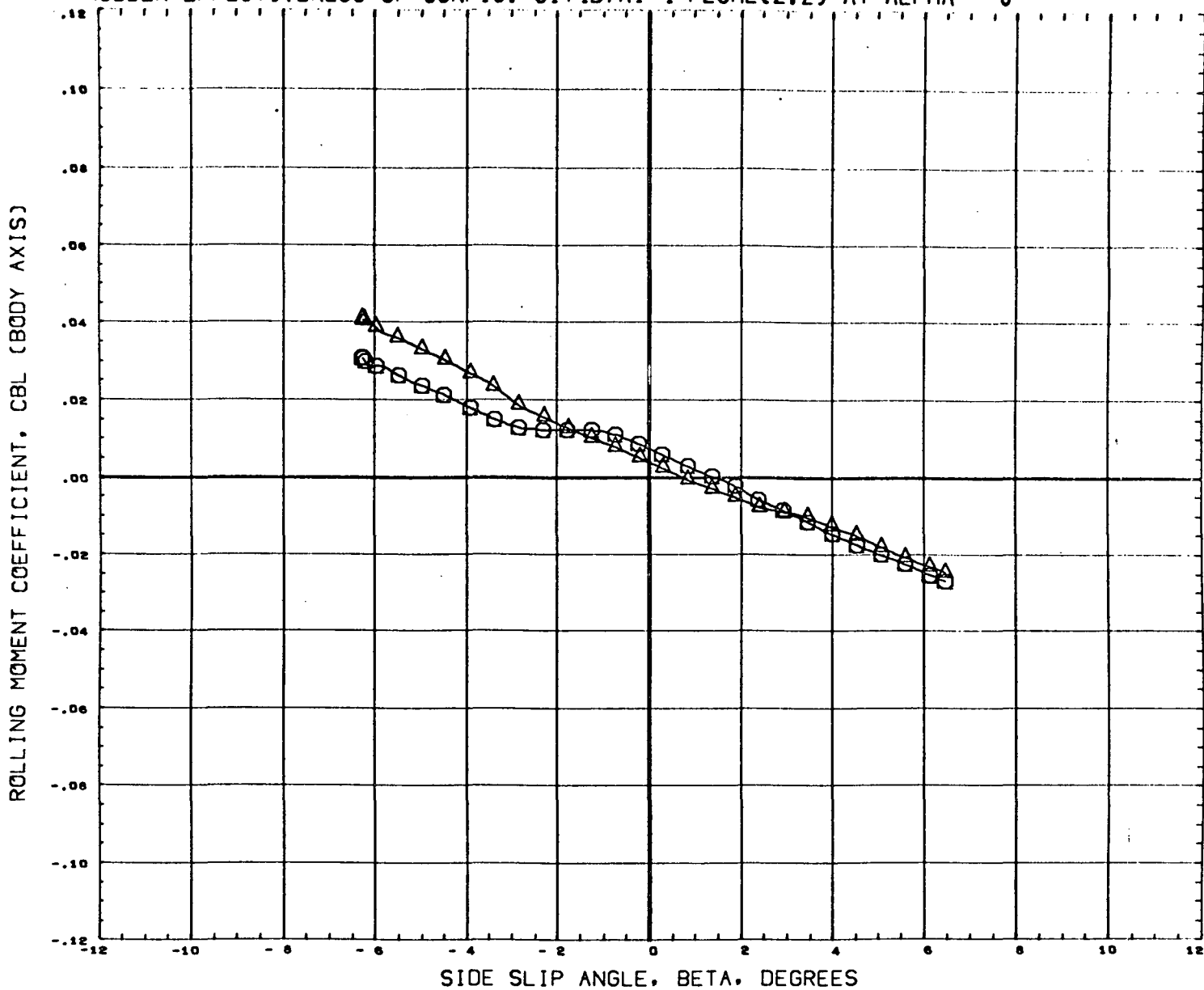


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7581)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7585)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# RUDDER EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT ALPHA = 0

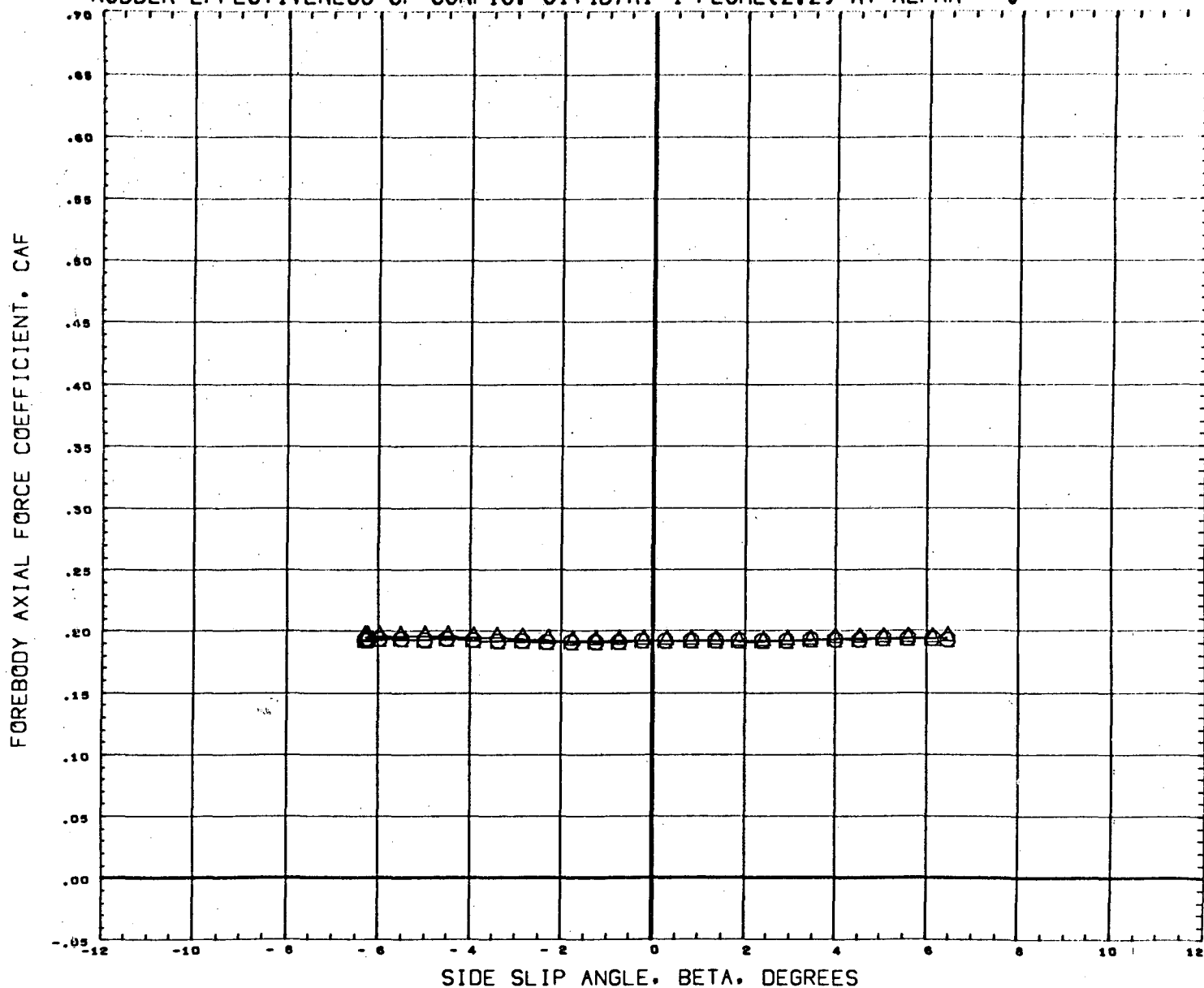


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7581)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7585)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

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# RUDDER EFFECTIVENESS OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT ALPHA = 0

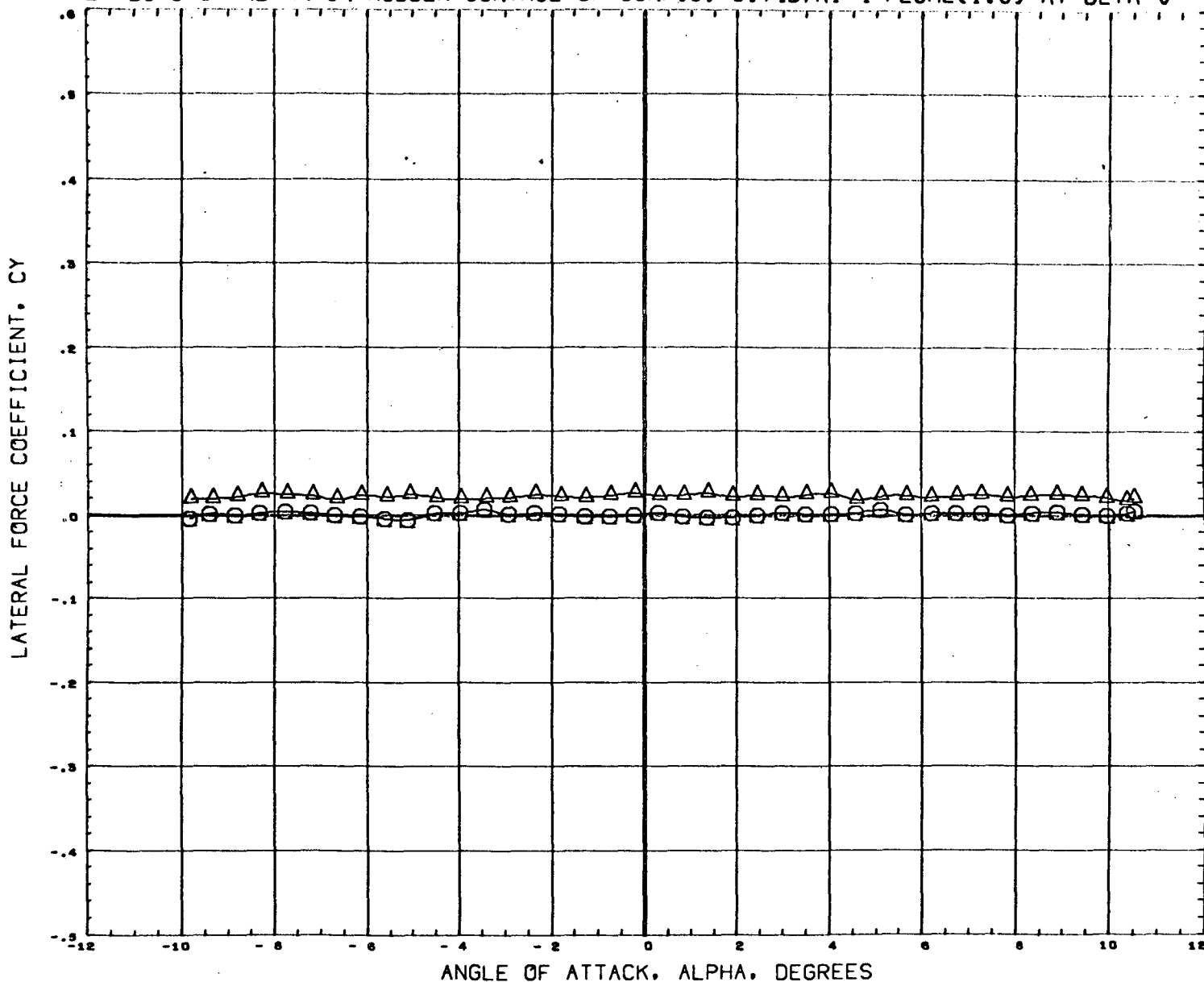


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7581)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7585)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF ALPHA ON RUDDER CONTROL OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT BETA=0

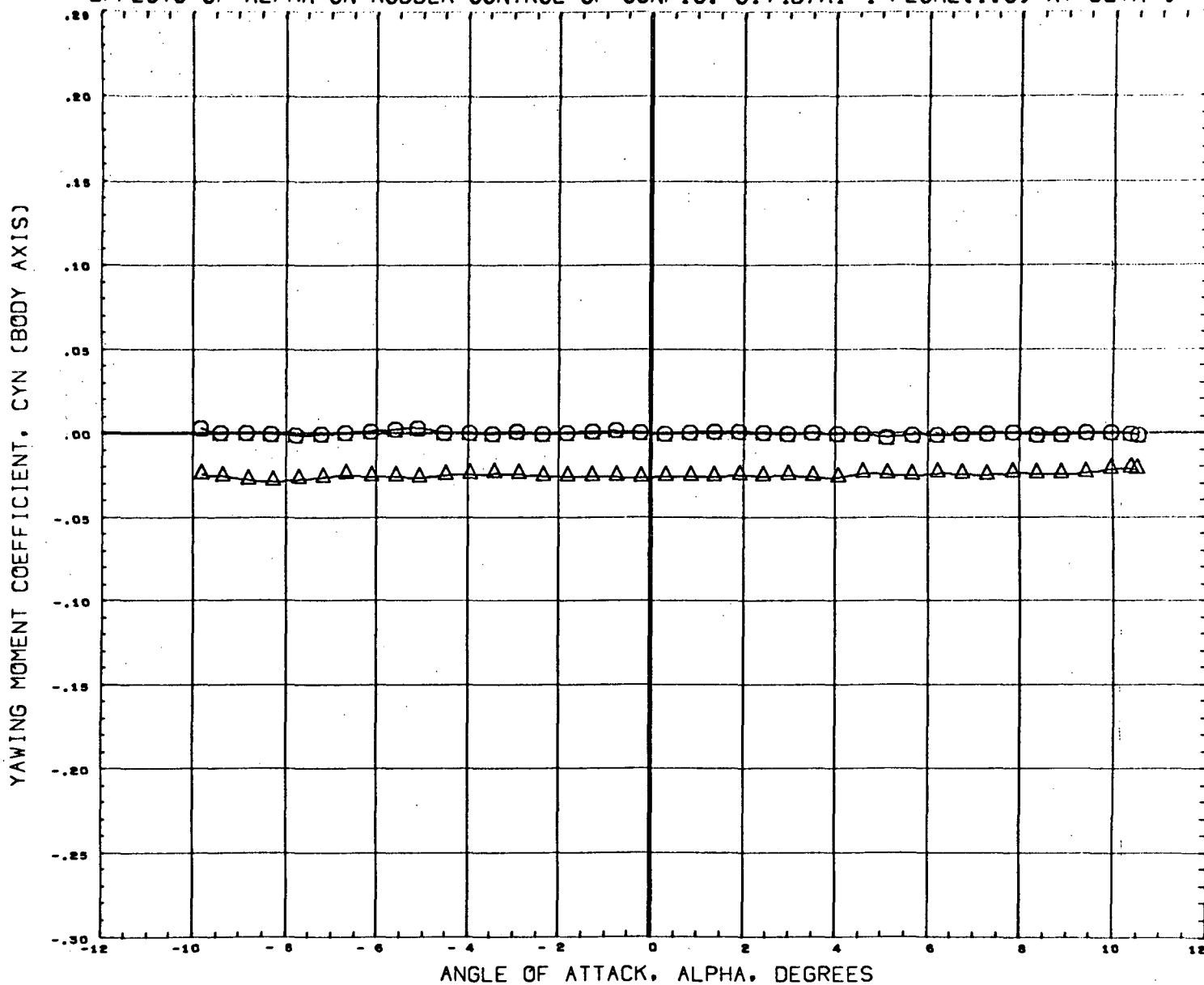


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(RD7578)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF ALPHA ON RUDDER CONTROL OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT BETA=0

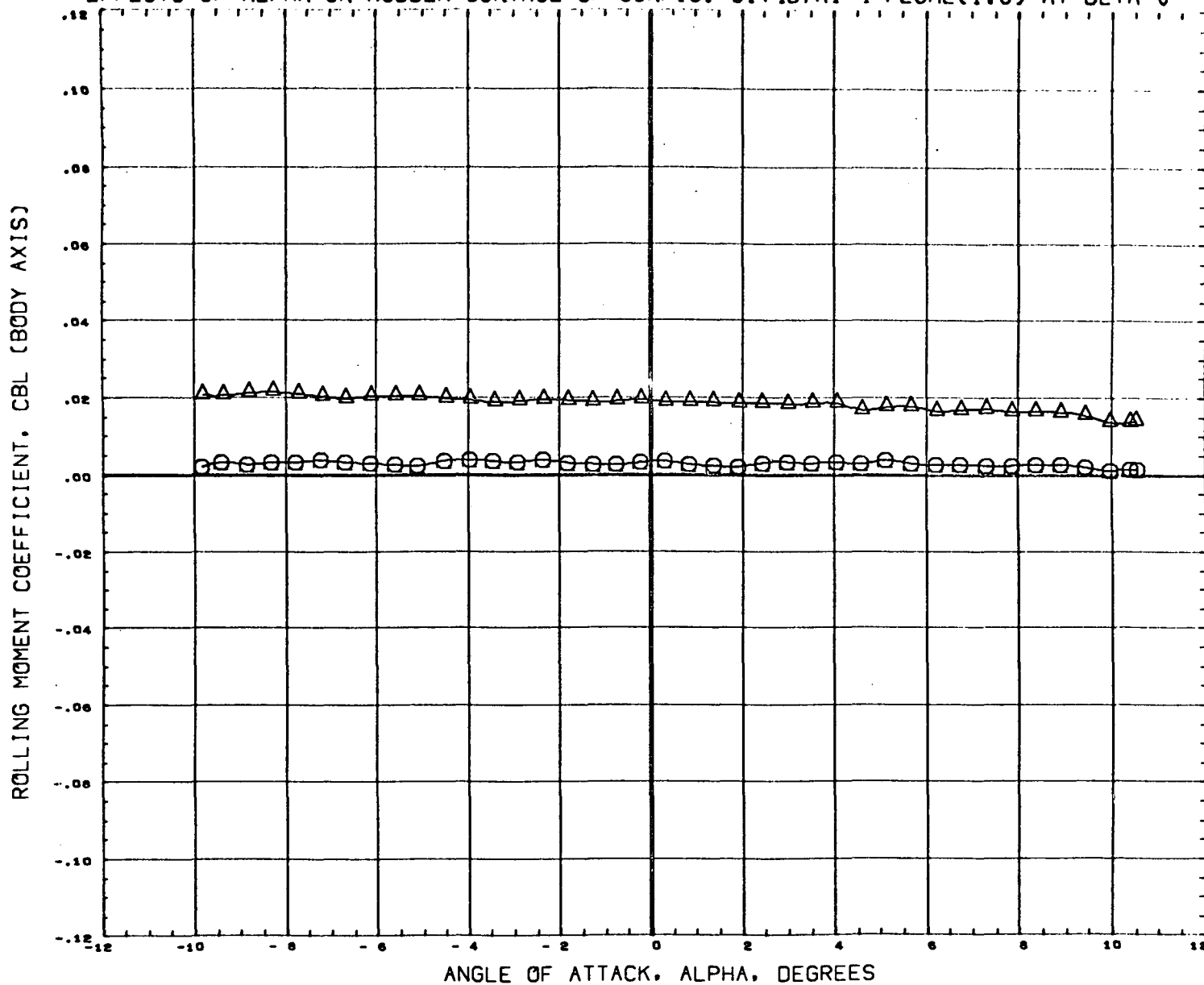


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7574)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7576)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	682.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF ALPHA ON RUDDER CONTROL OF CONFIG. 01T4B7A1-4+PLUME(1.5) AT BETA=0



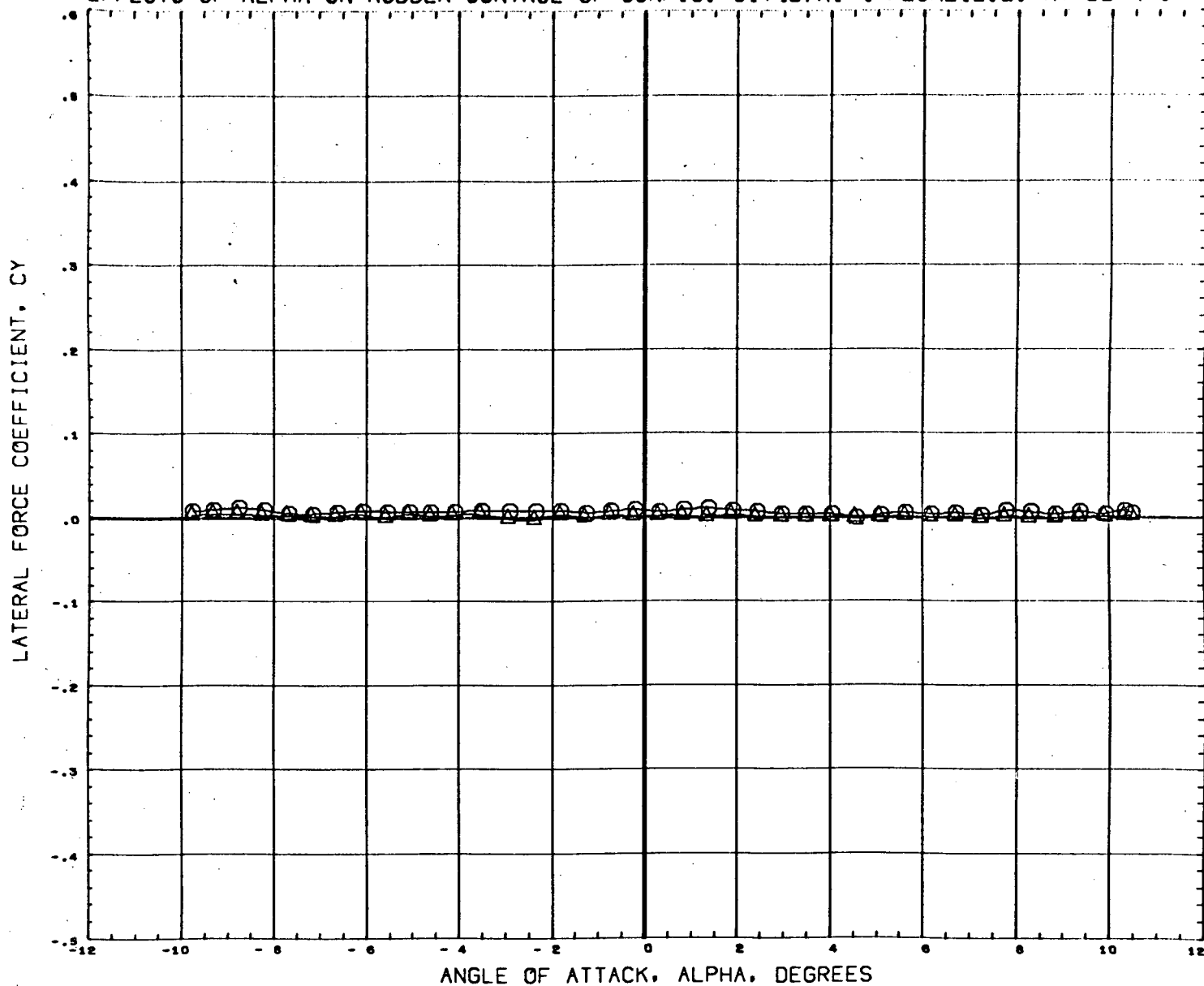
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7574)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7576)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(1.5)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF ALPHA ON RUDDER CONTROL OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT BETA=0

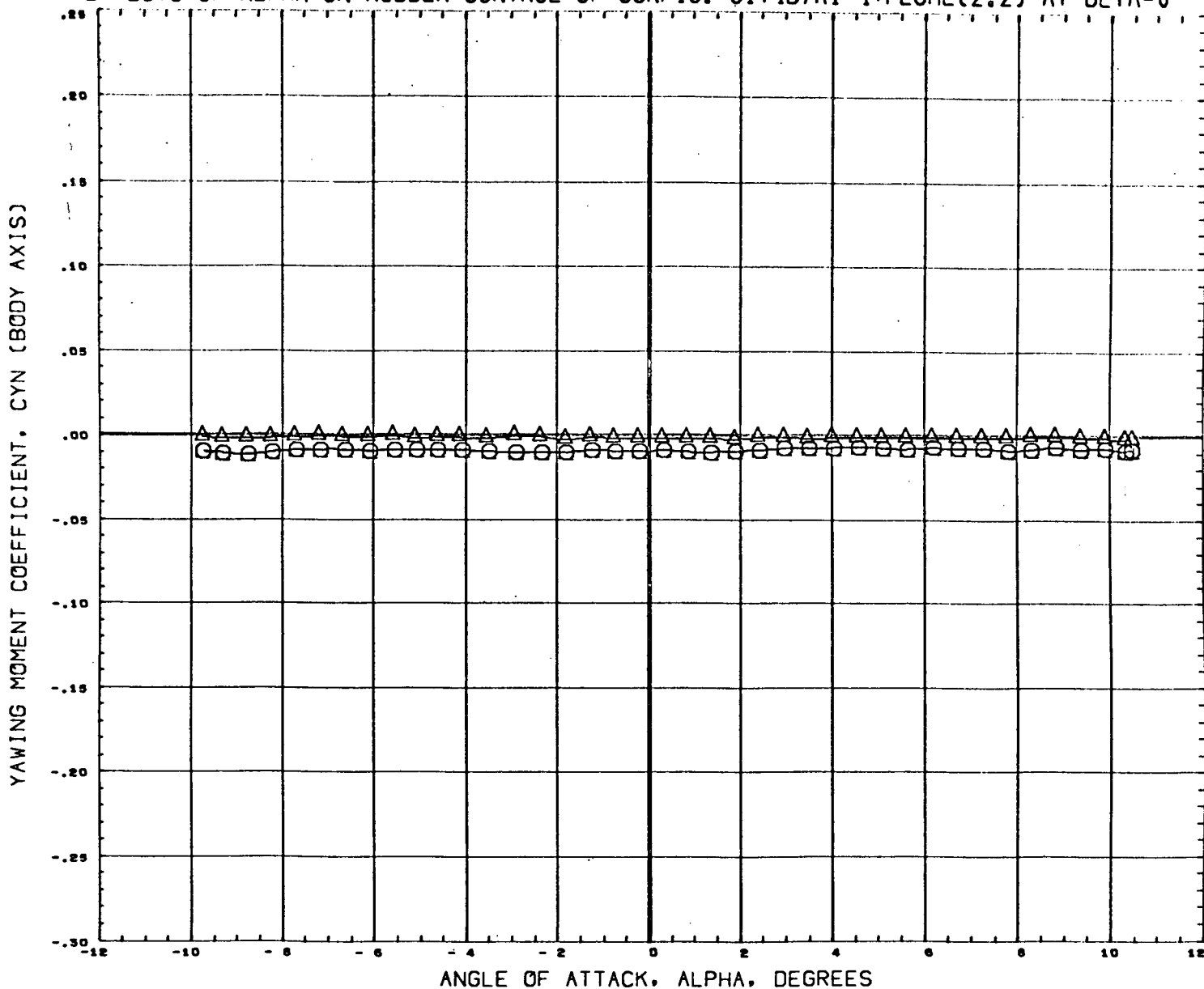


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(R07580)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(R07584)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF ALPHA ON RUDDER CONTROL OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT BETA=0

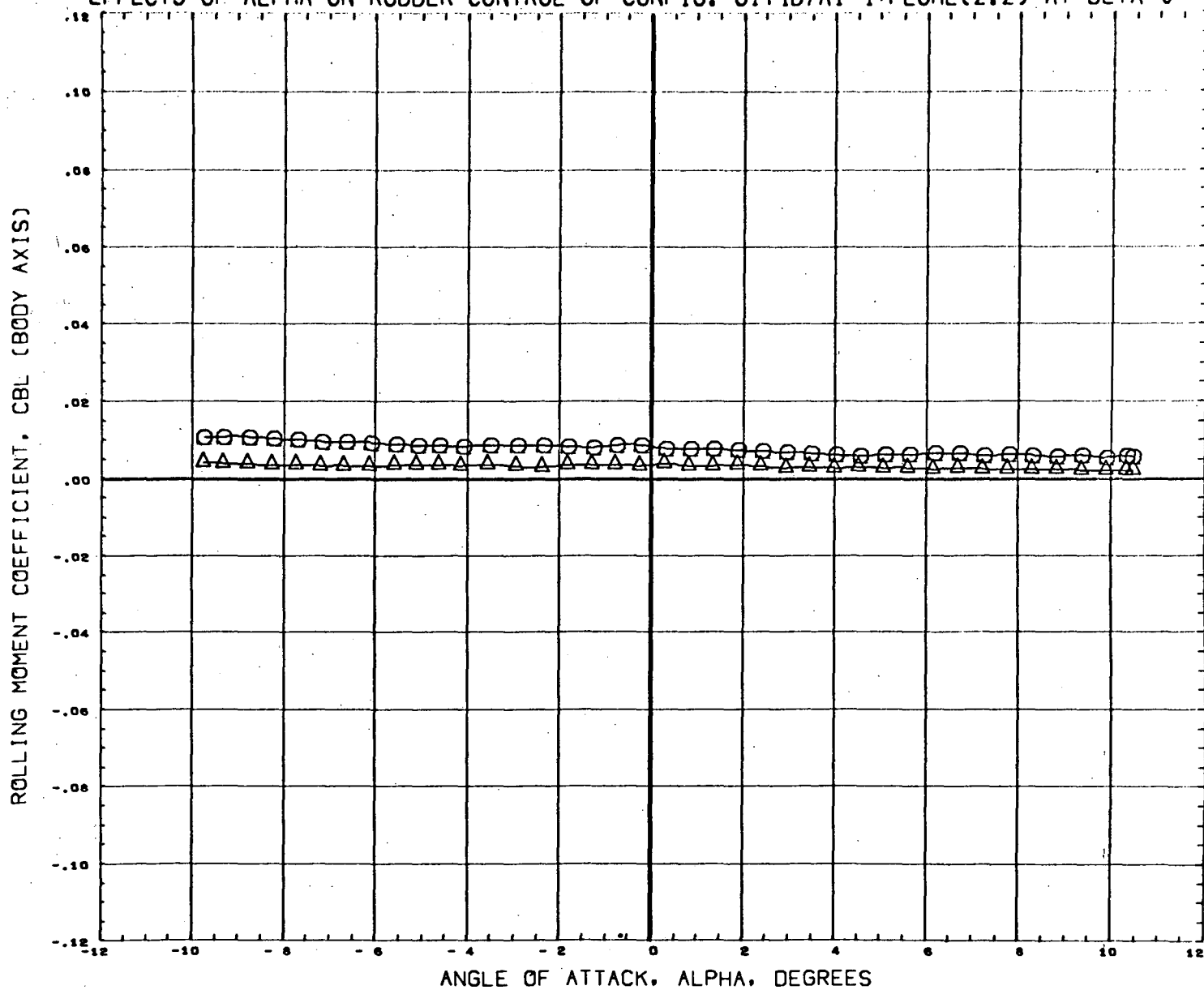


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7580)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7584)	MDAC S-222 COMPOSITE (T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF ALPHA ON RUDDER CONTROL OF CONFIG. 01T4B7A1-4+PLUME(2.2) AT BETA=0

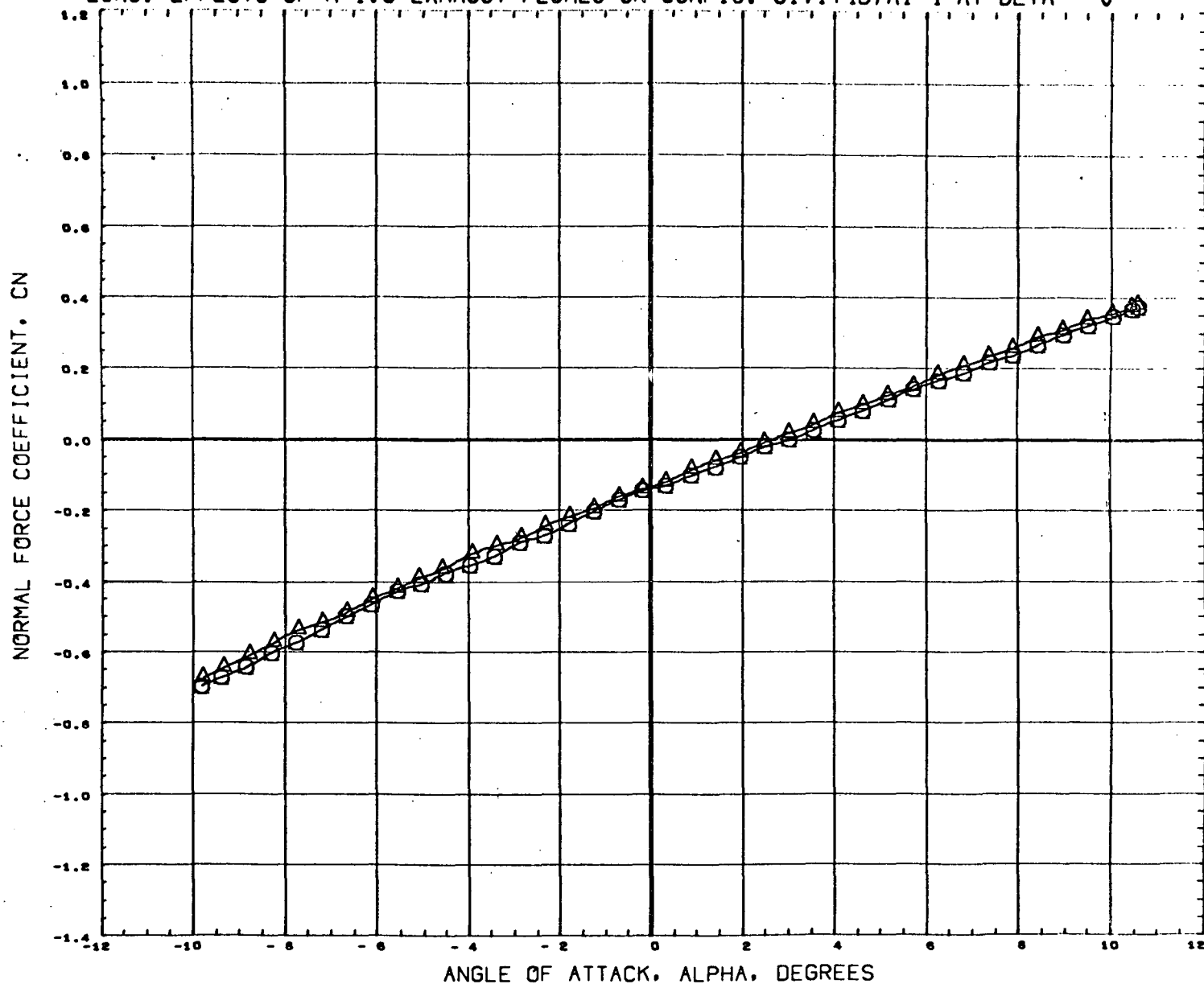


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7580)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7584)	MDAC S-222 COMPOSITE(T-CG) 01T4B7A1-4+PLUME(2.2)	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	957.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

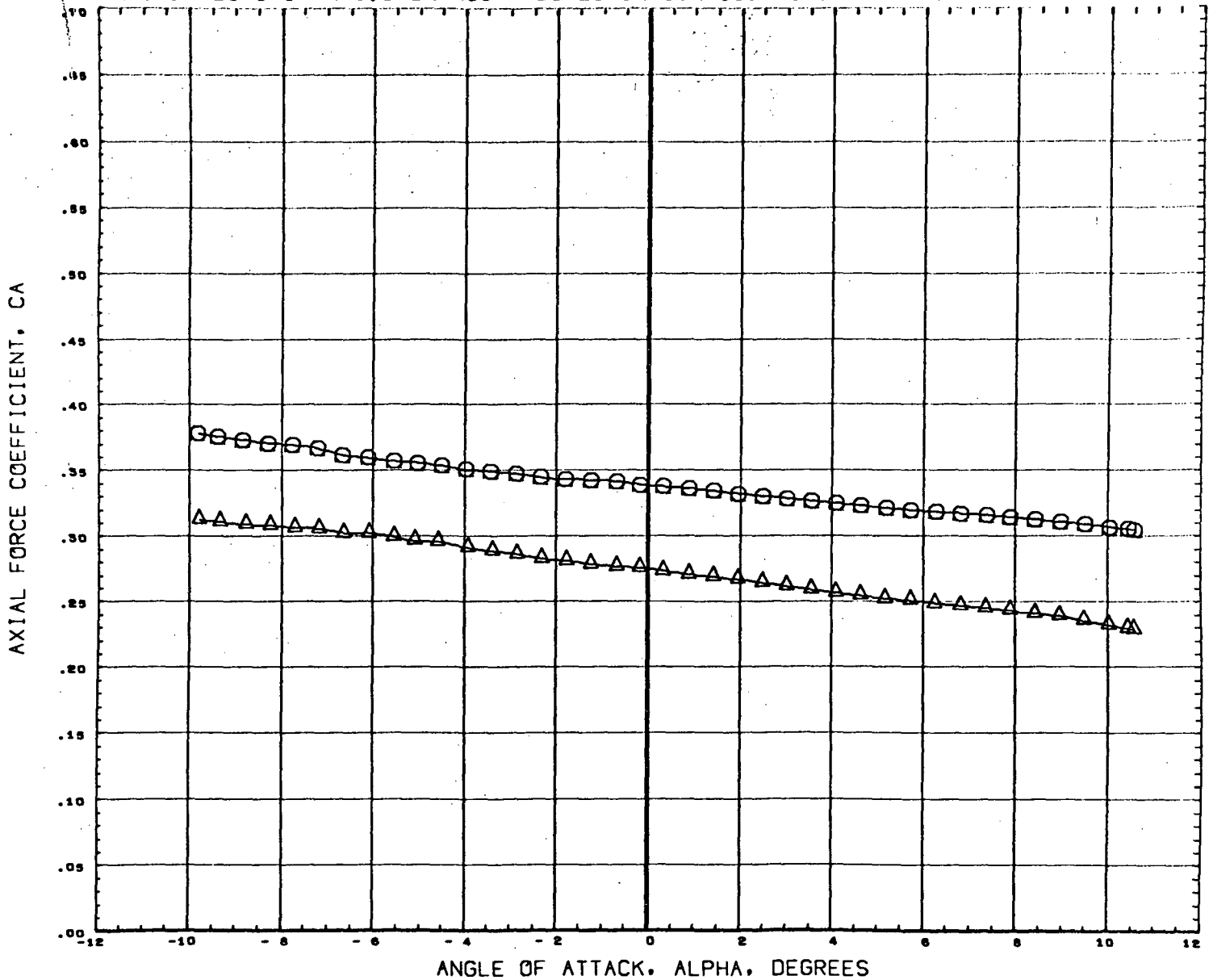


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

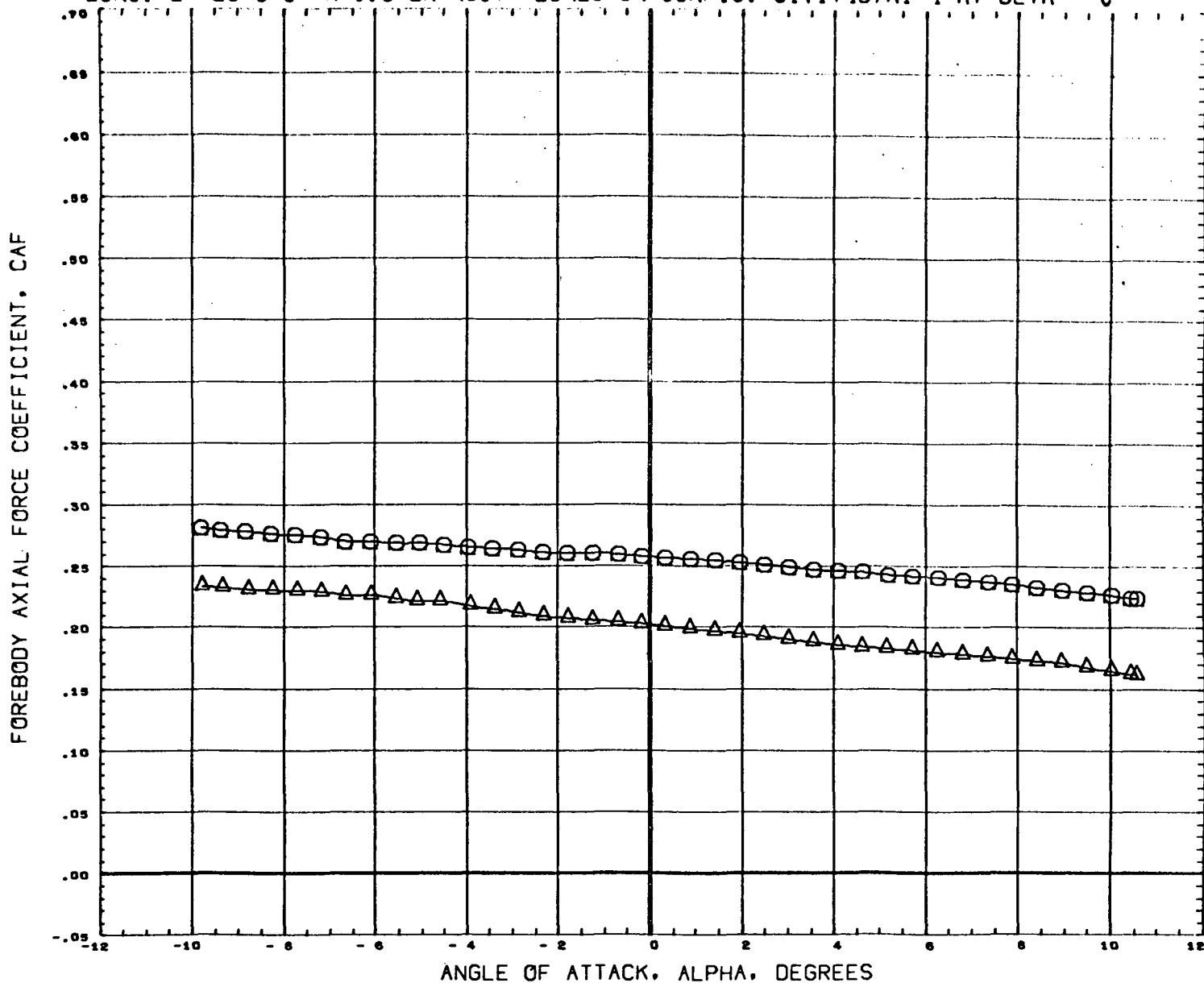


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	662.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

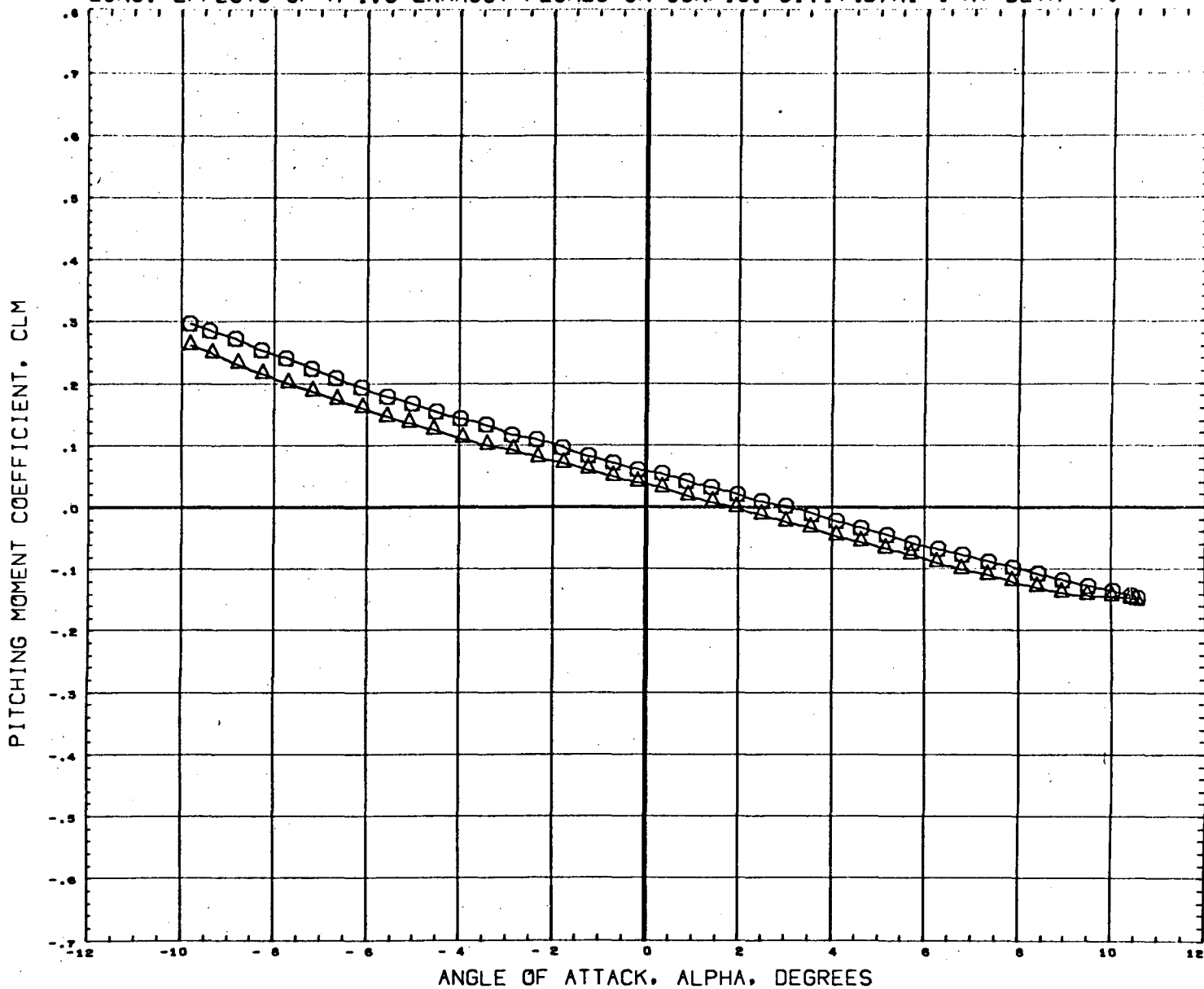


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

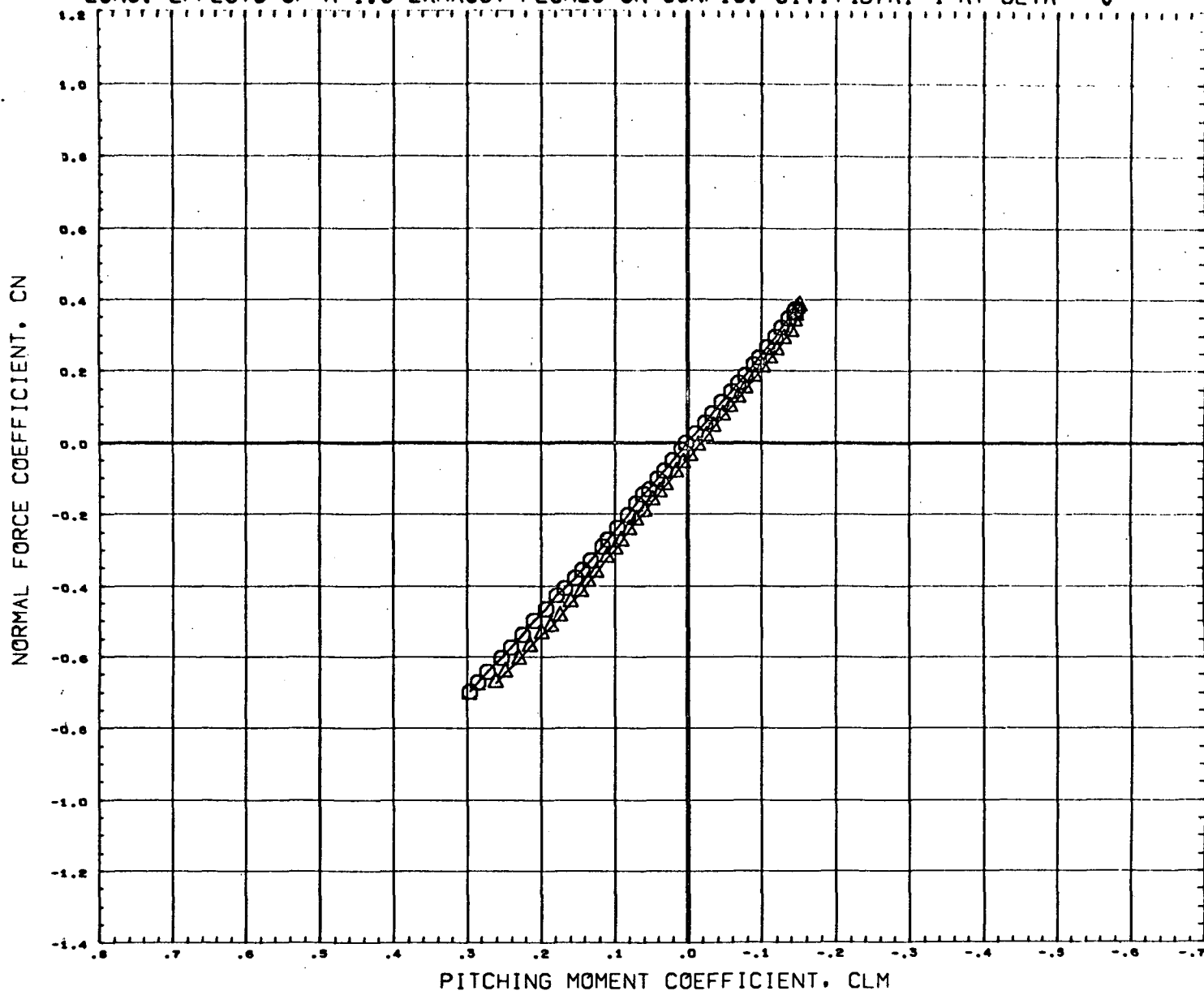


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0



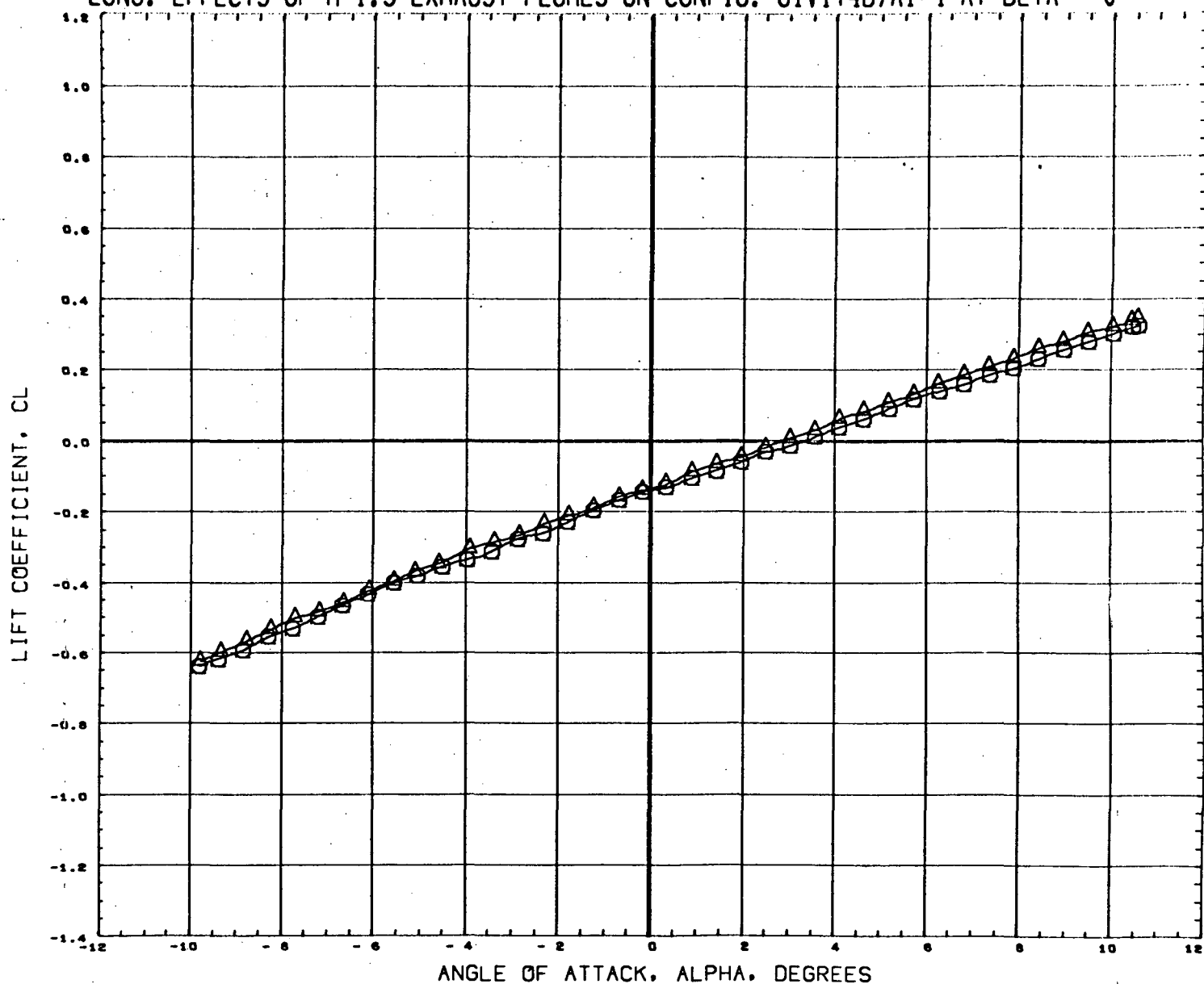
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(CD7592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004	IN.
						BREF	862.0004	IN.
						XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

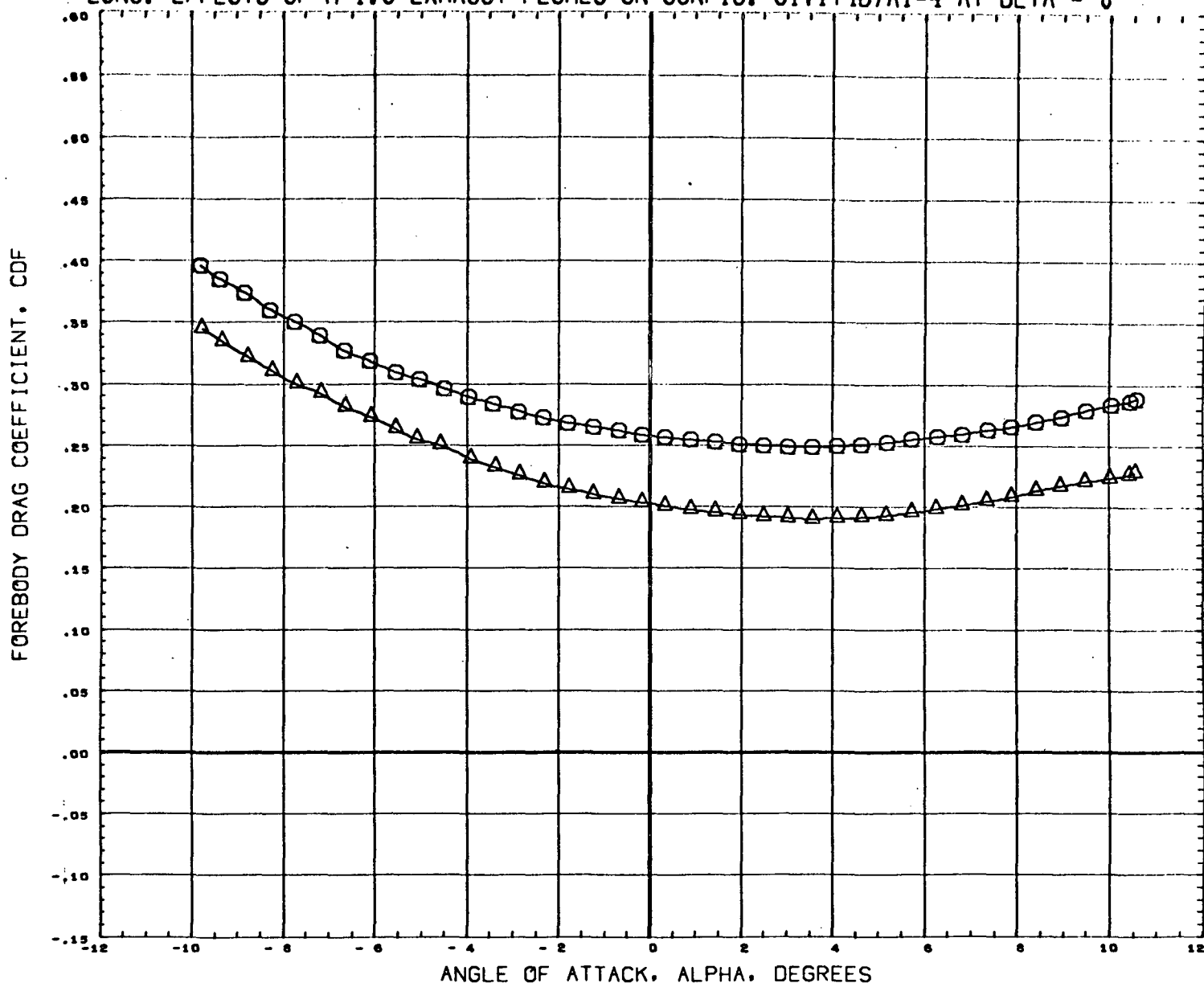


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0



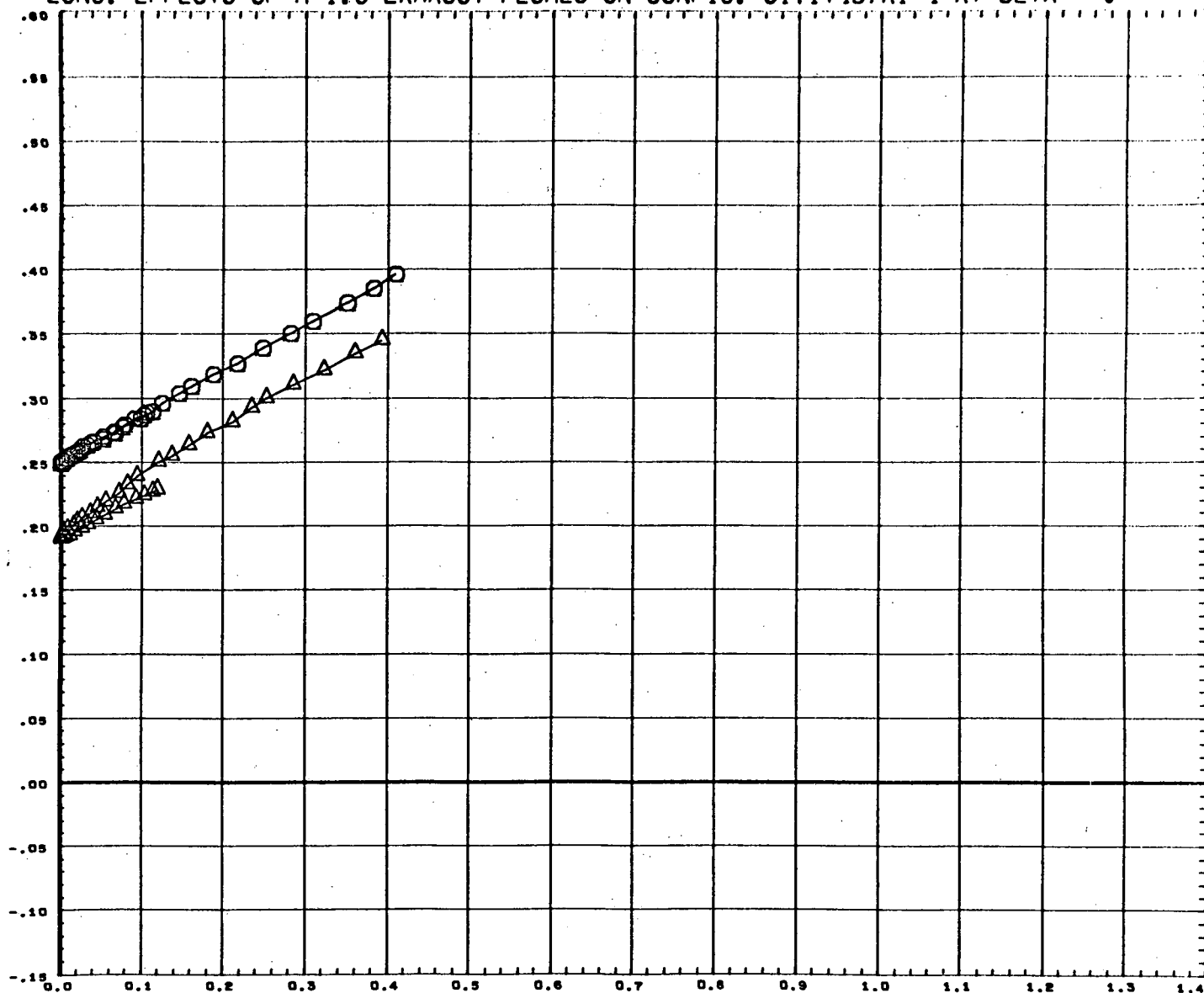
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQR

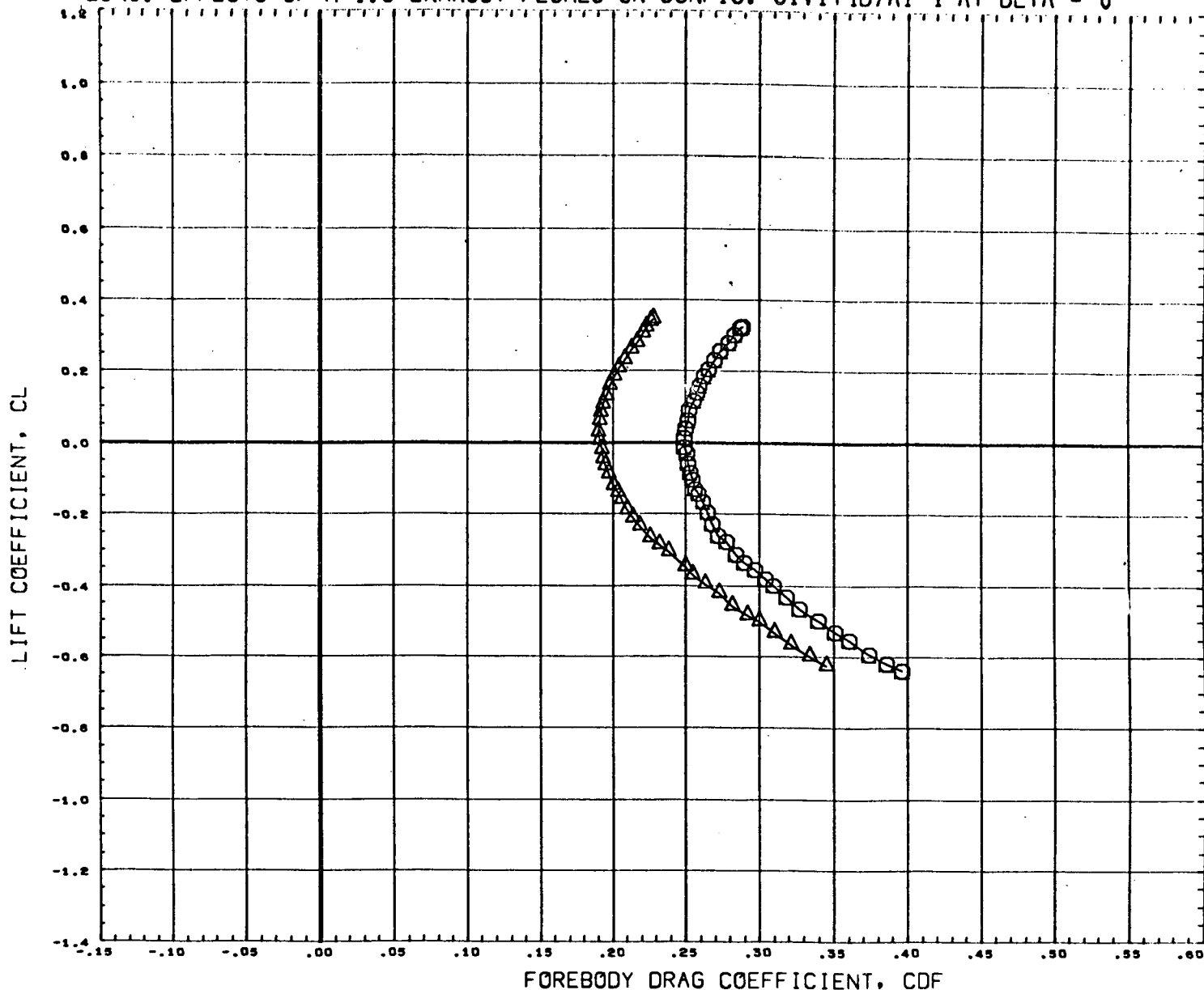
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

1.51

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# LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

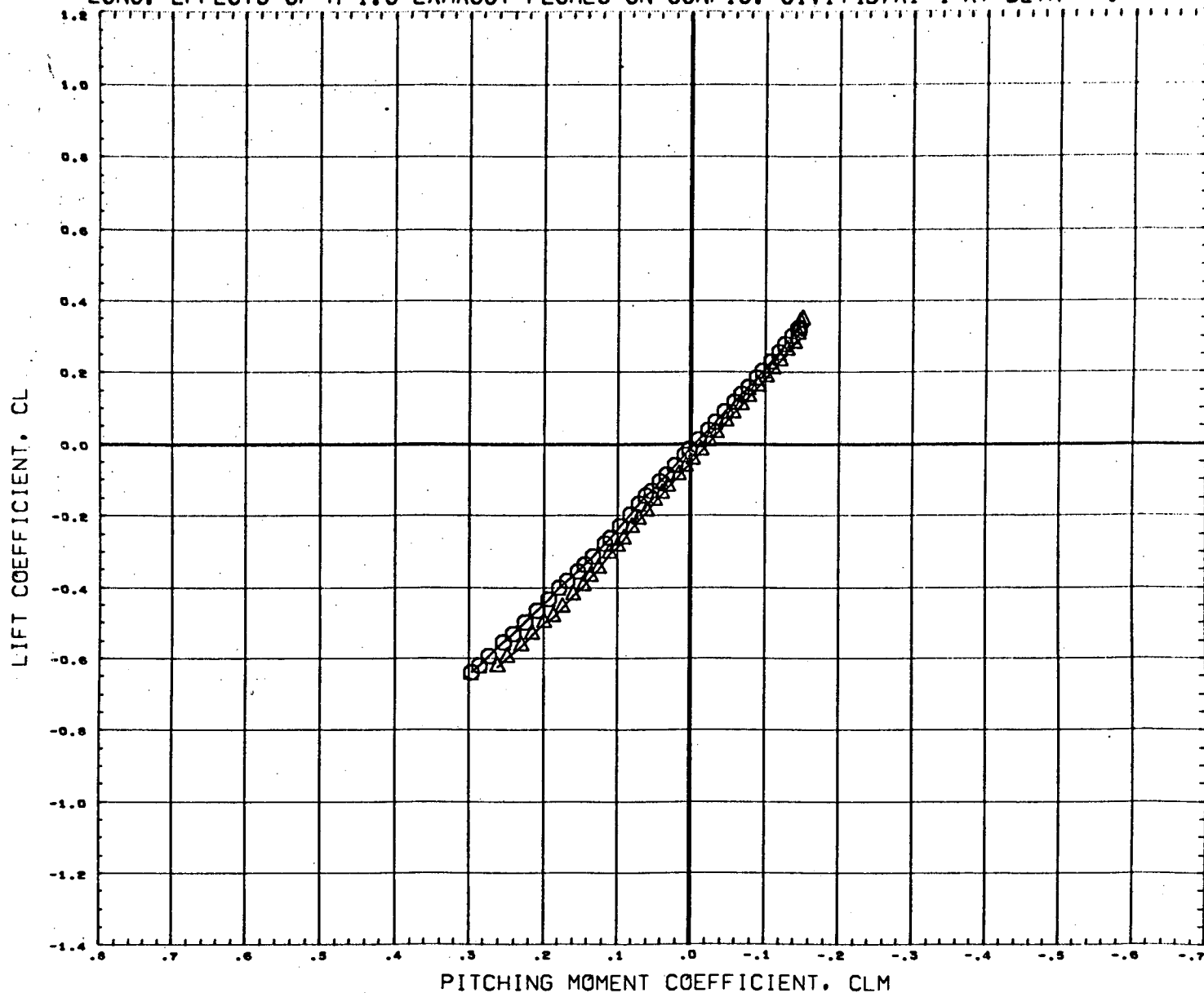


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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LONG. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

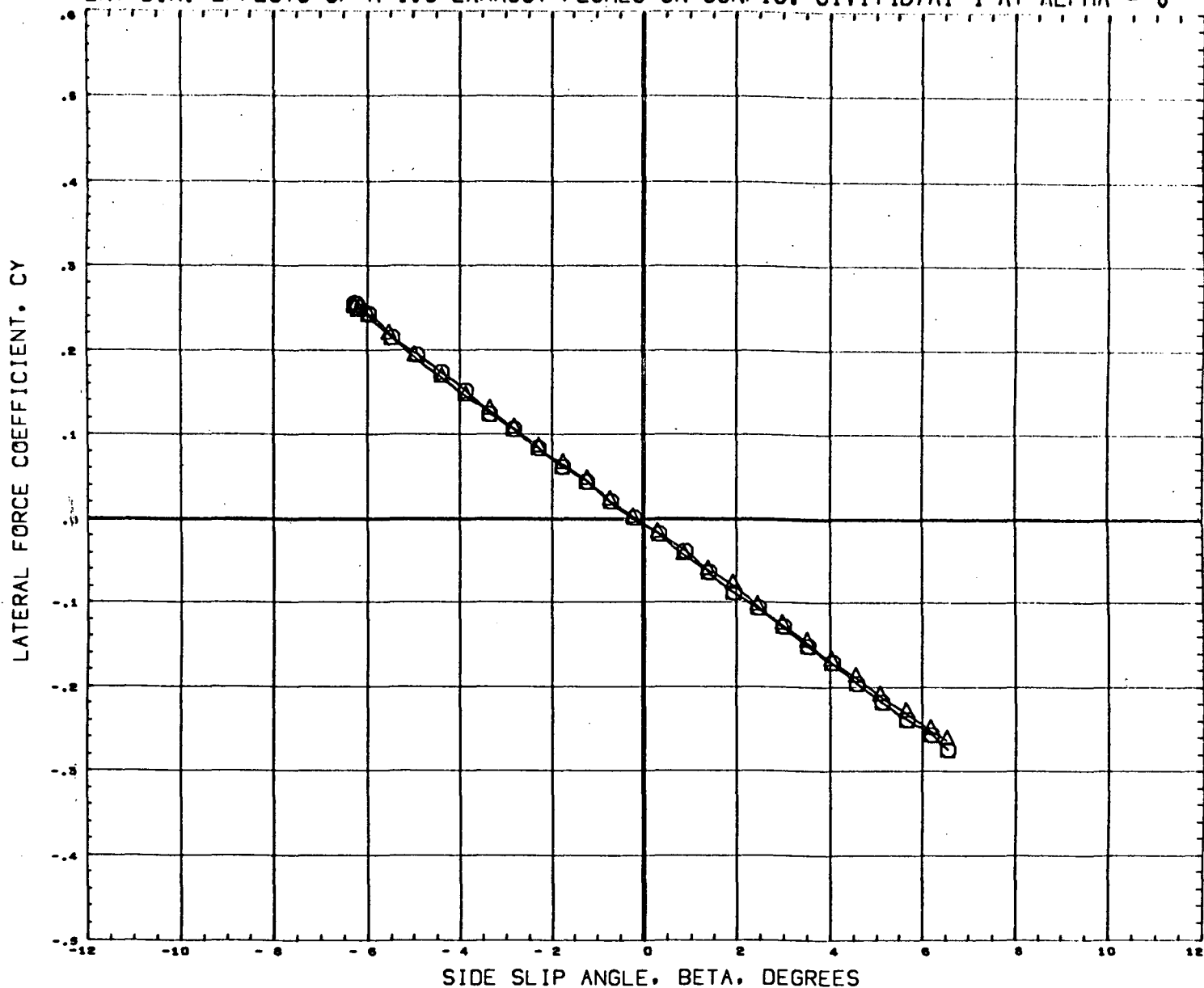


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0080

MACH 1.51

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# LAT-DIR. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT ALPHA = 0

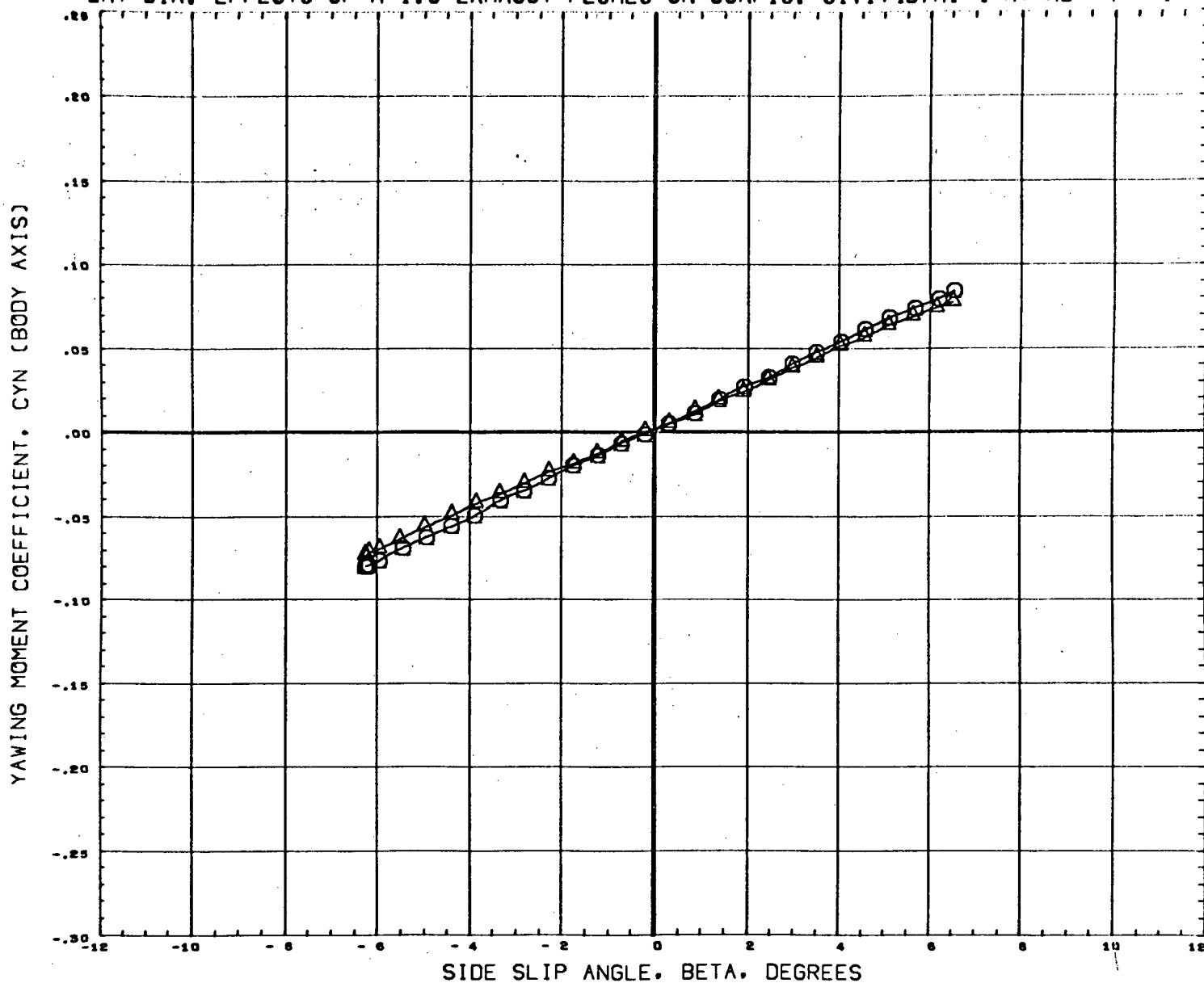


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD75A2)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT ALPHA = 0

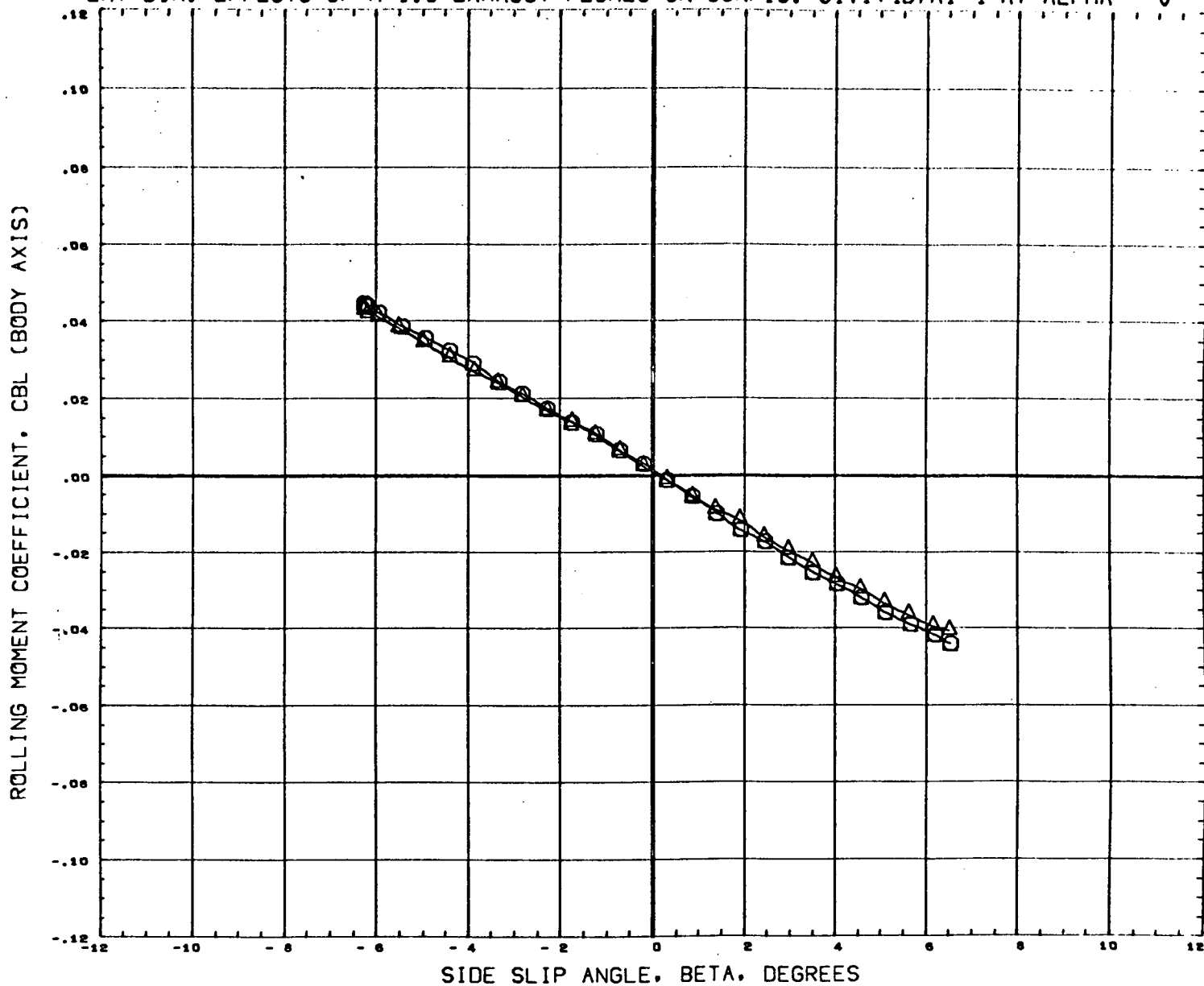


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD75A2)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT ALPHA = 0



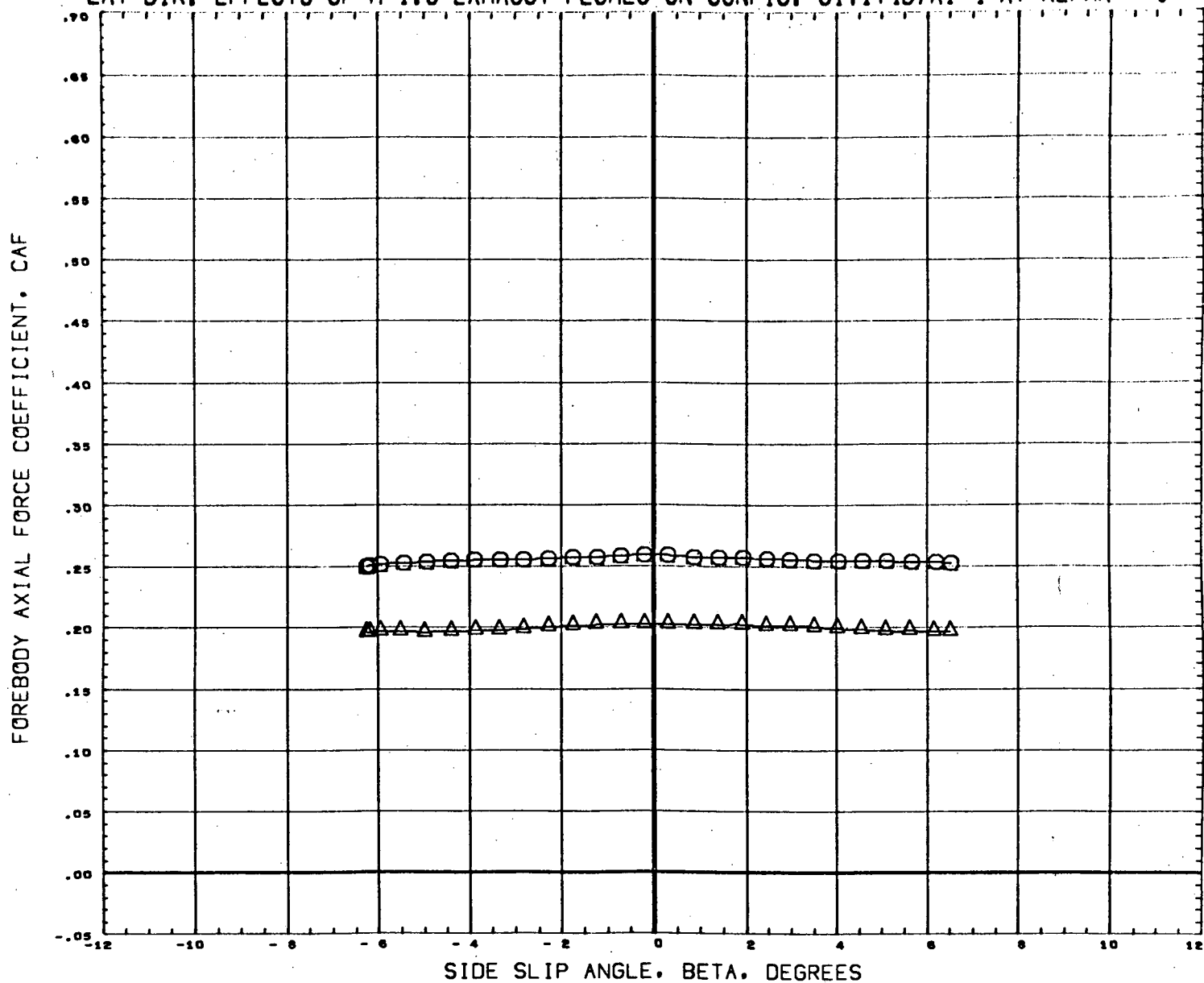
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD75B3)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD75A2)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LAT-DIR. EFFECTS OF M=1.5 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT ALPHA = 0



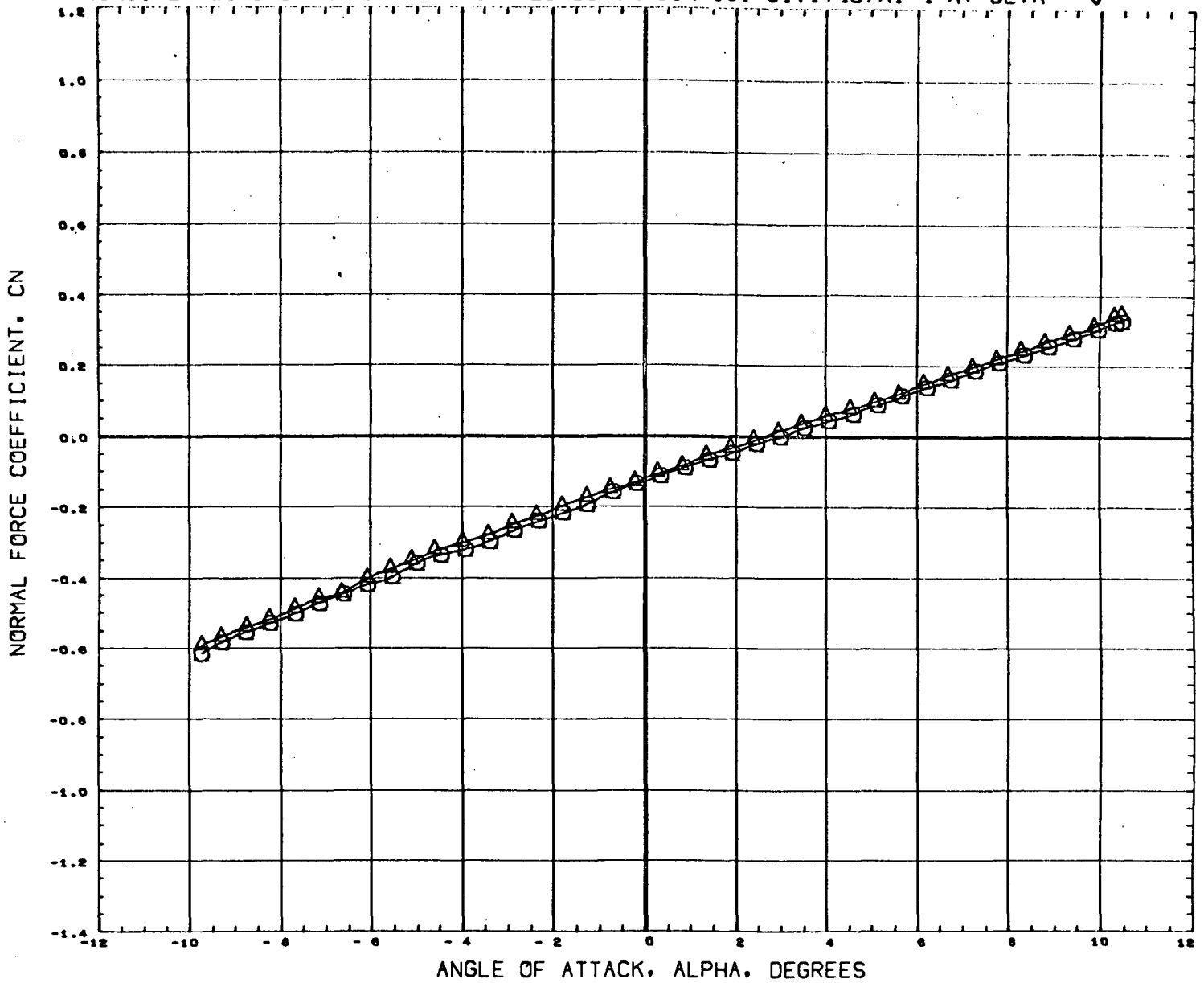
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD75A2)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	LREF	609.9004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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A-3

# LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

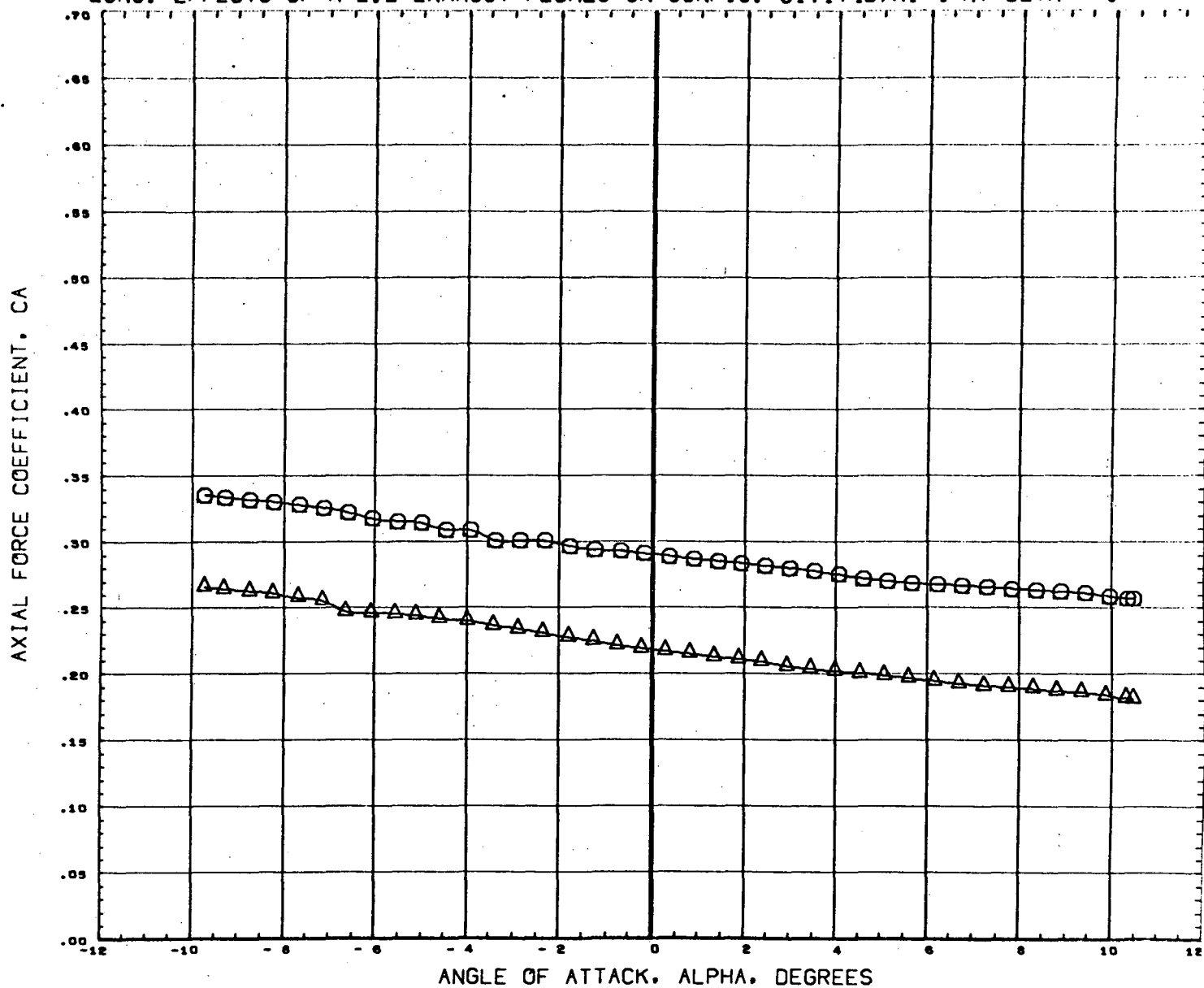


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

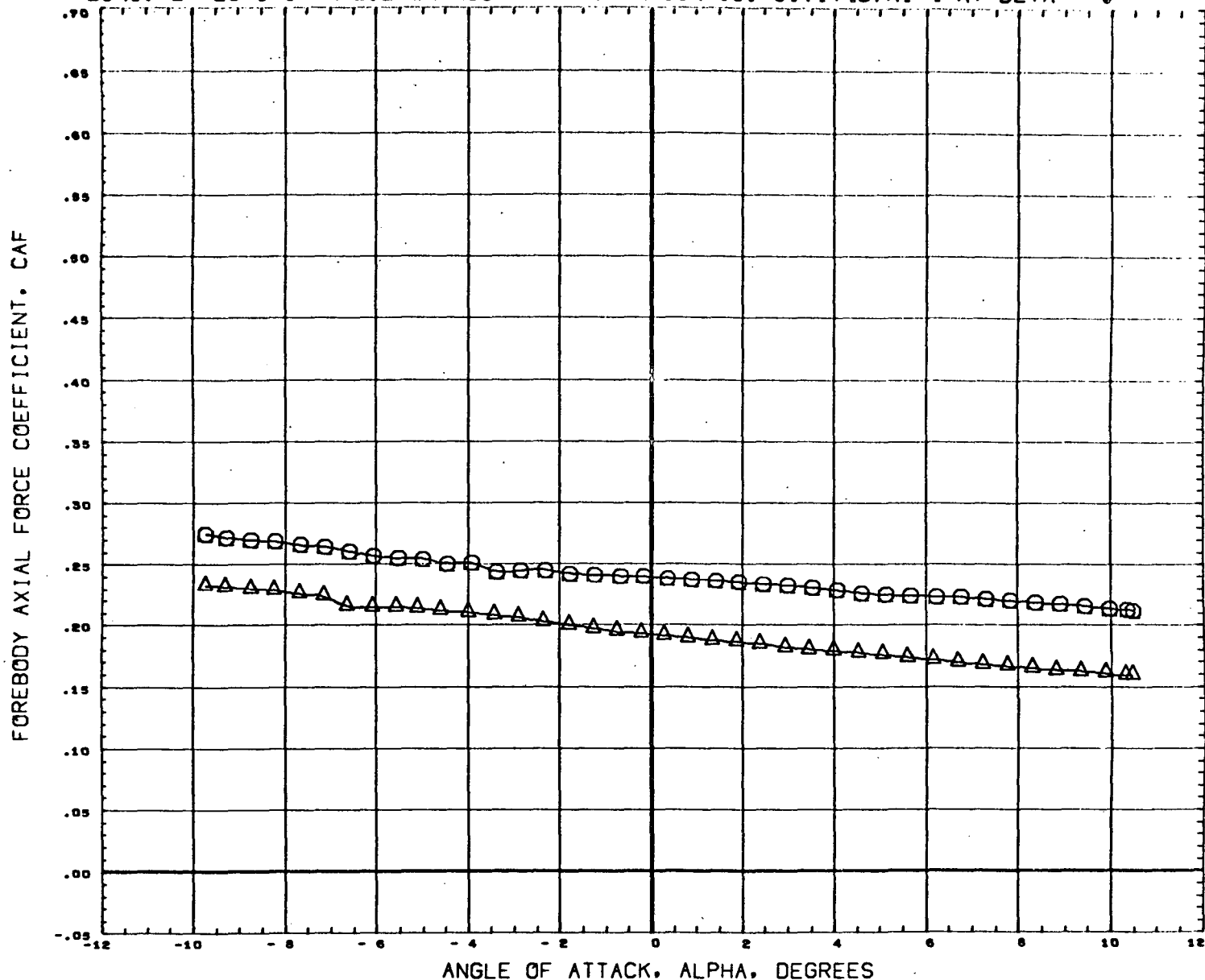


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-C6) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75B1)	MDAC S-222 COMPOSITE(T-C6) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.3004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

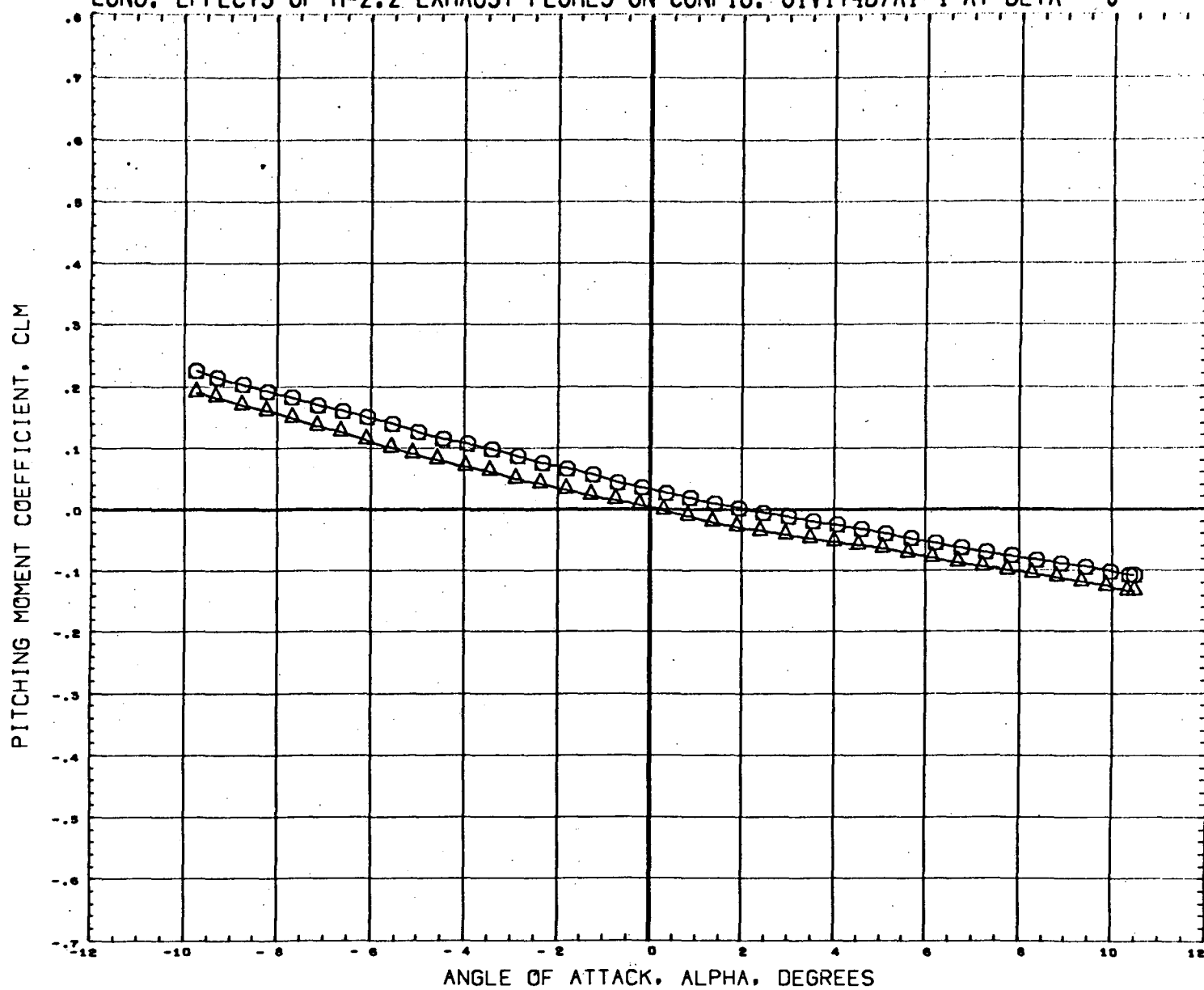


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07581)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	809.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

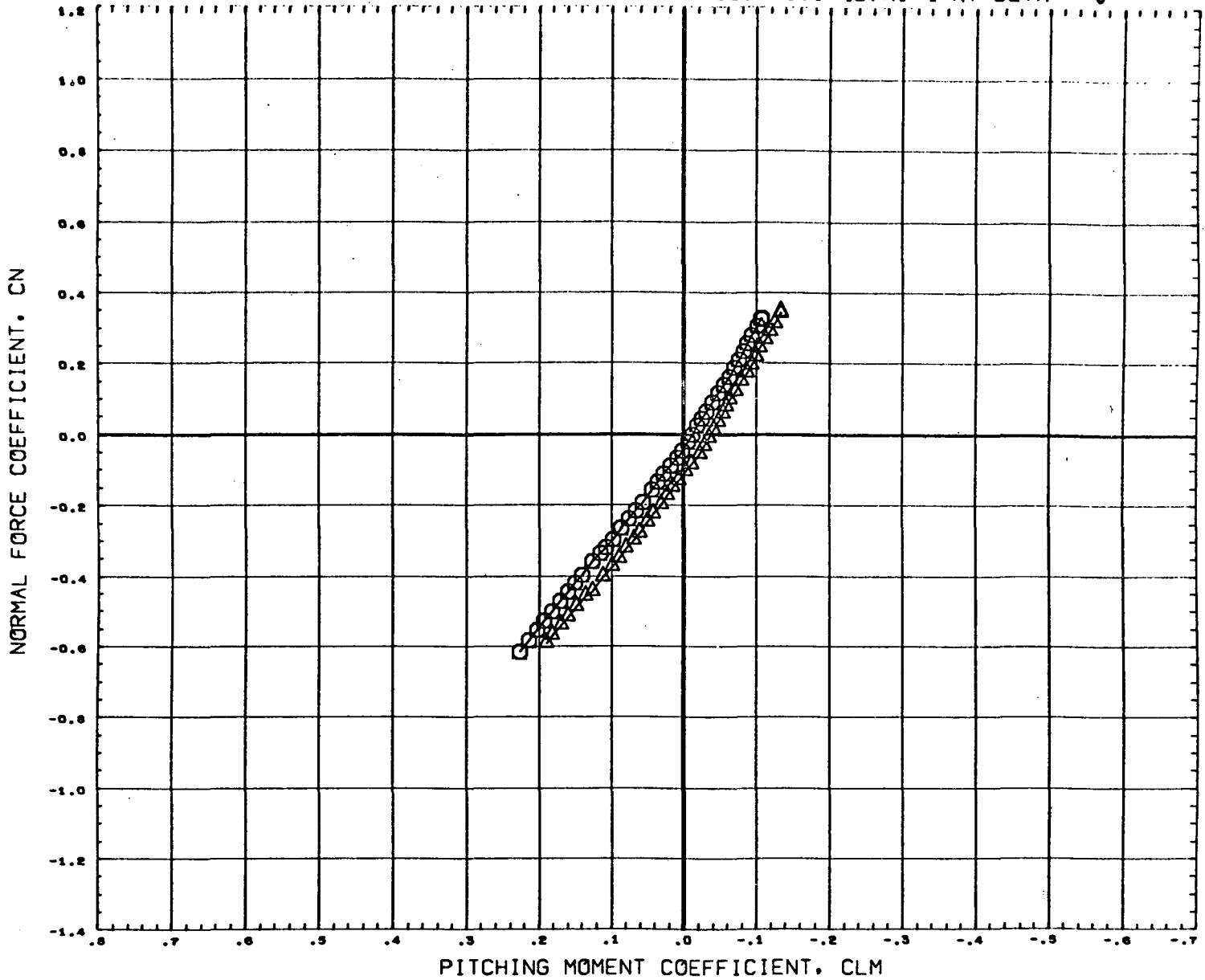


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7581)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

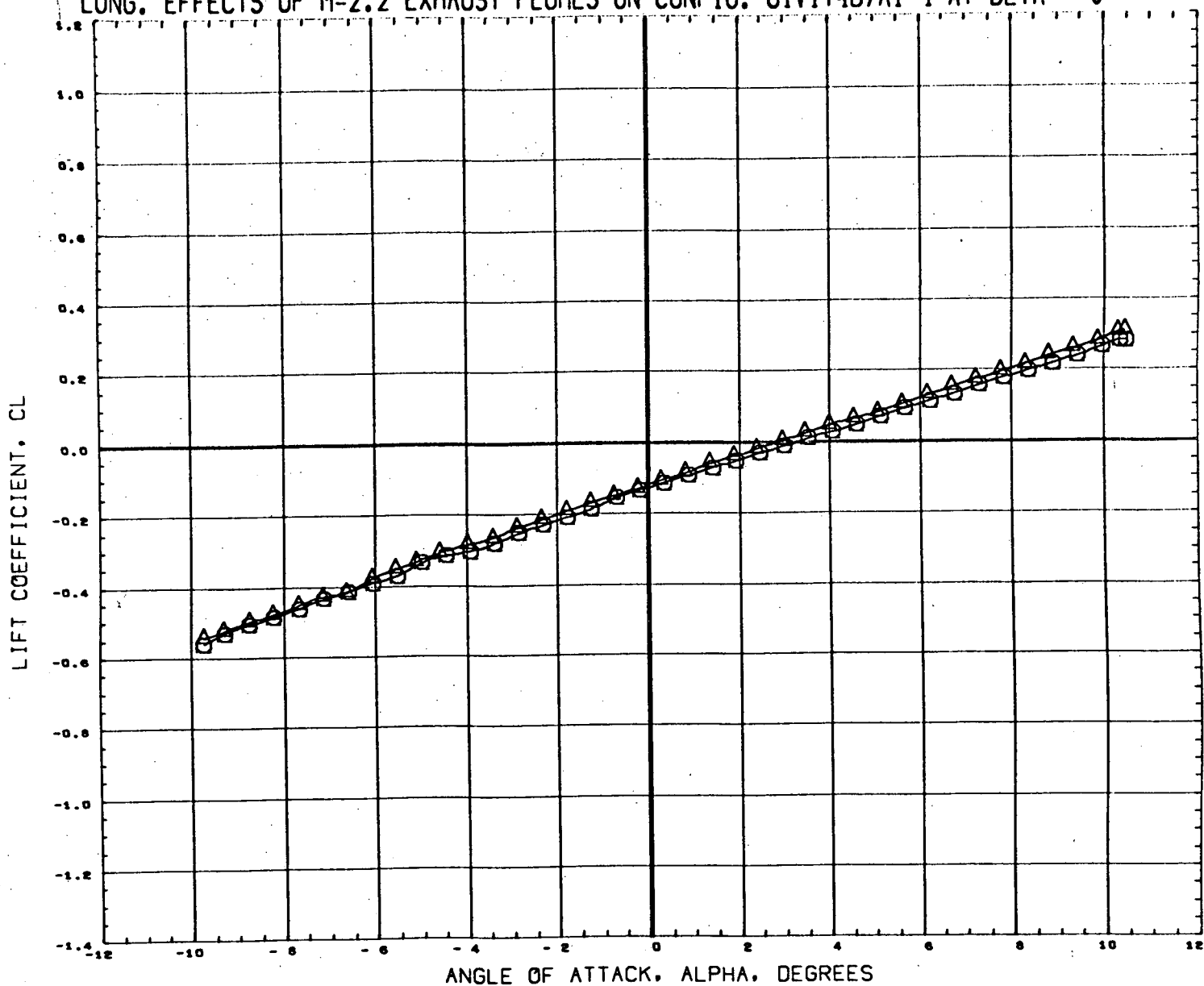


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD75B1)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION			
		BETA	ELEVTR	AILRON	RUDDER
(C07592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000
(C07581)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000

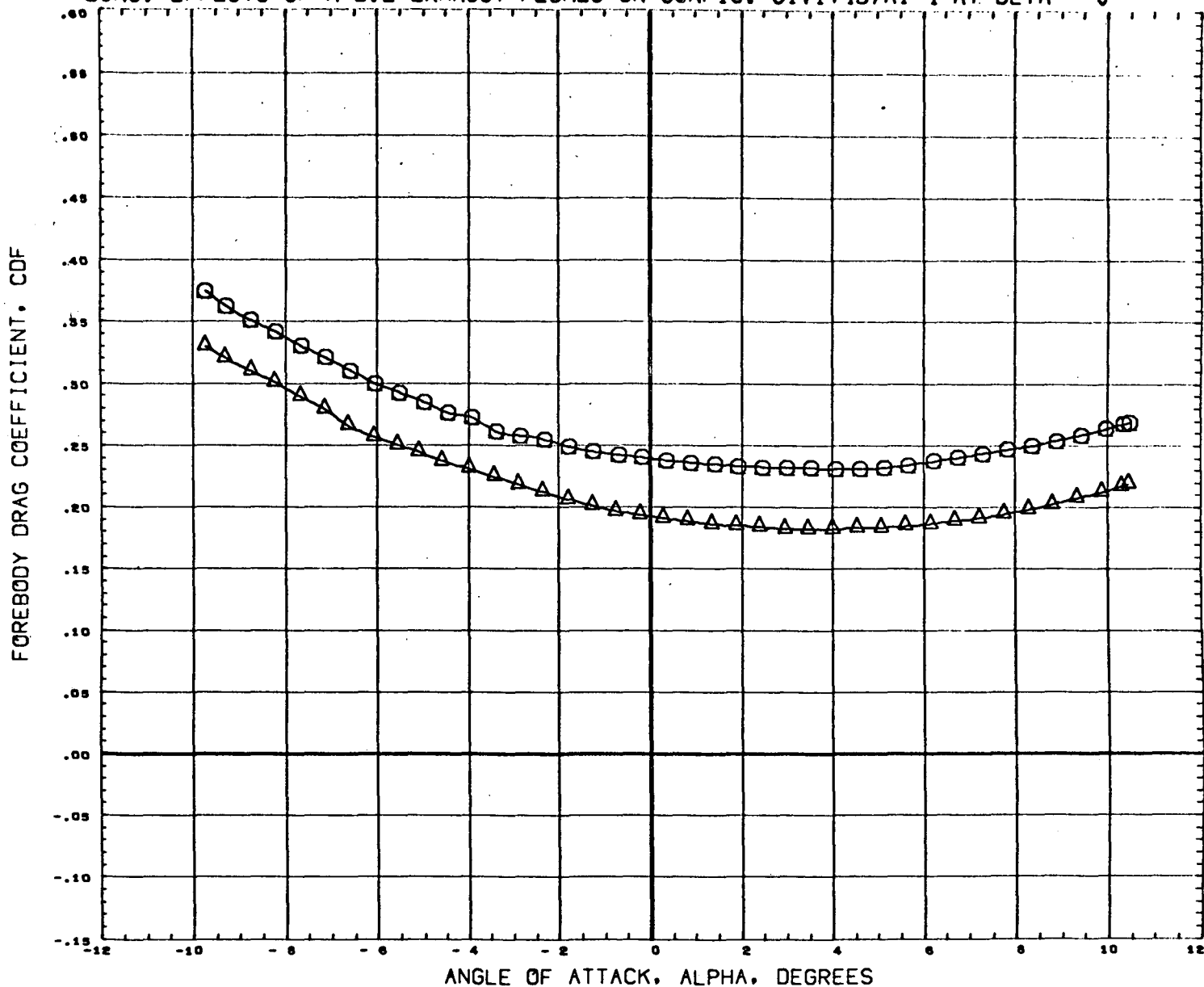
  

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH 2.20

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LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0



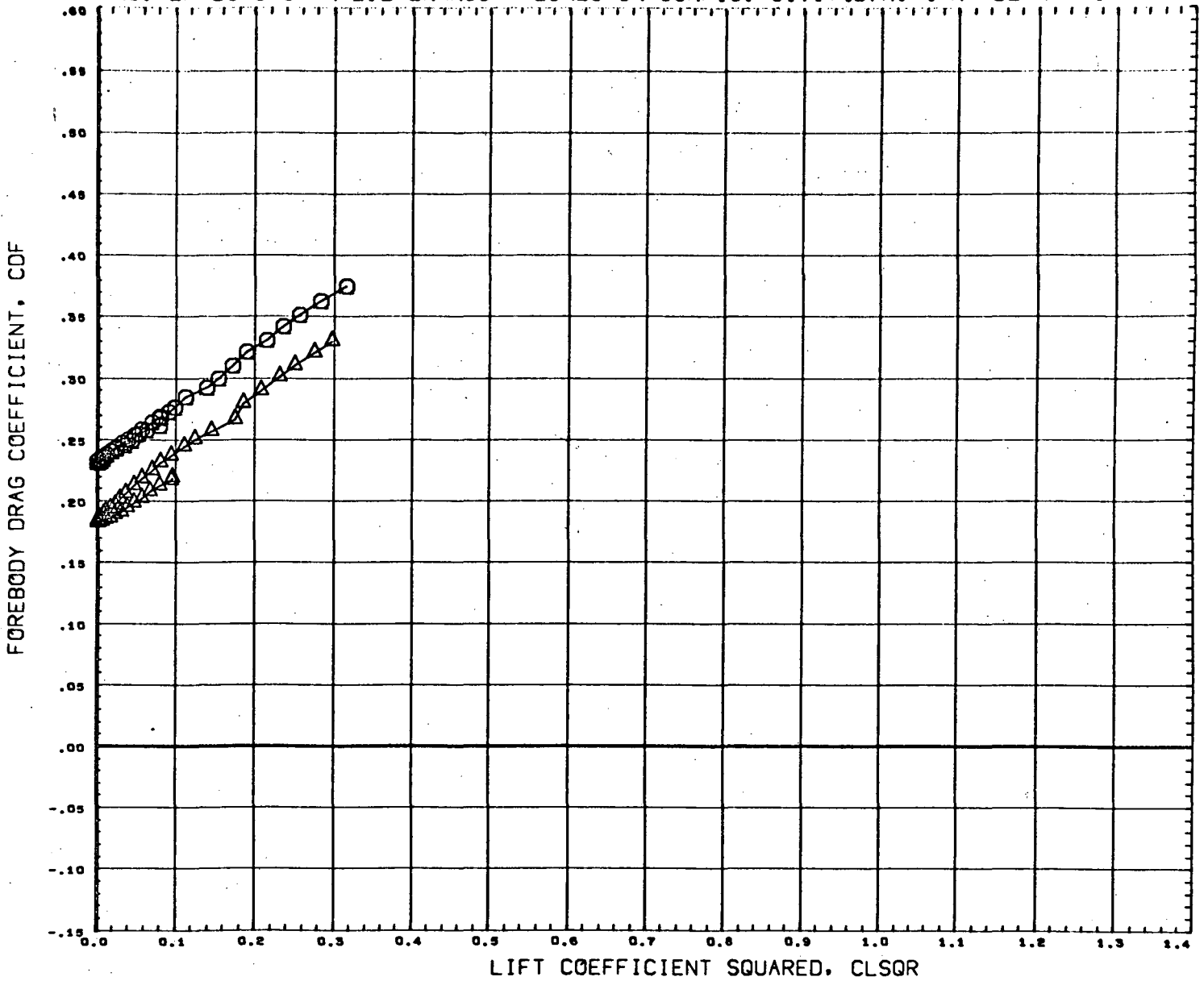
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

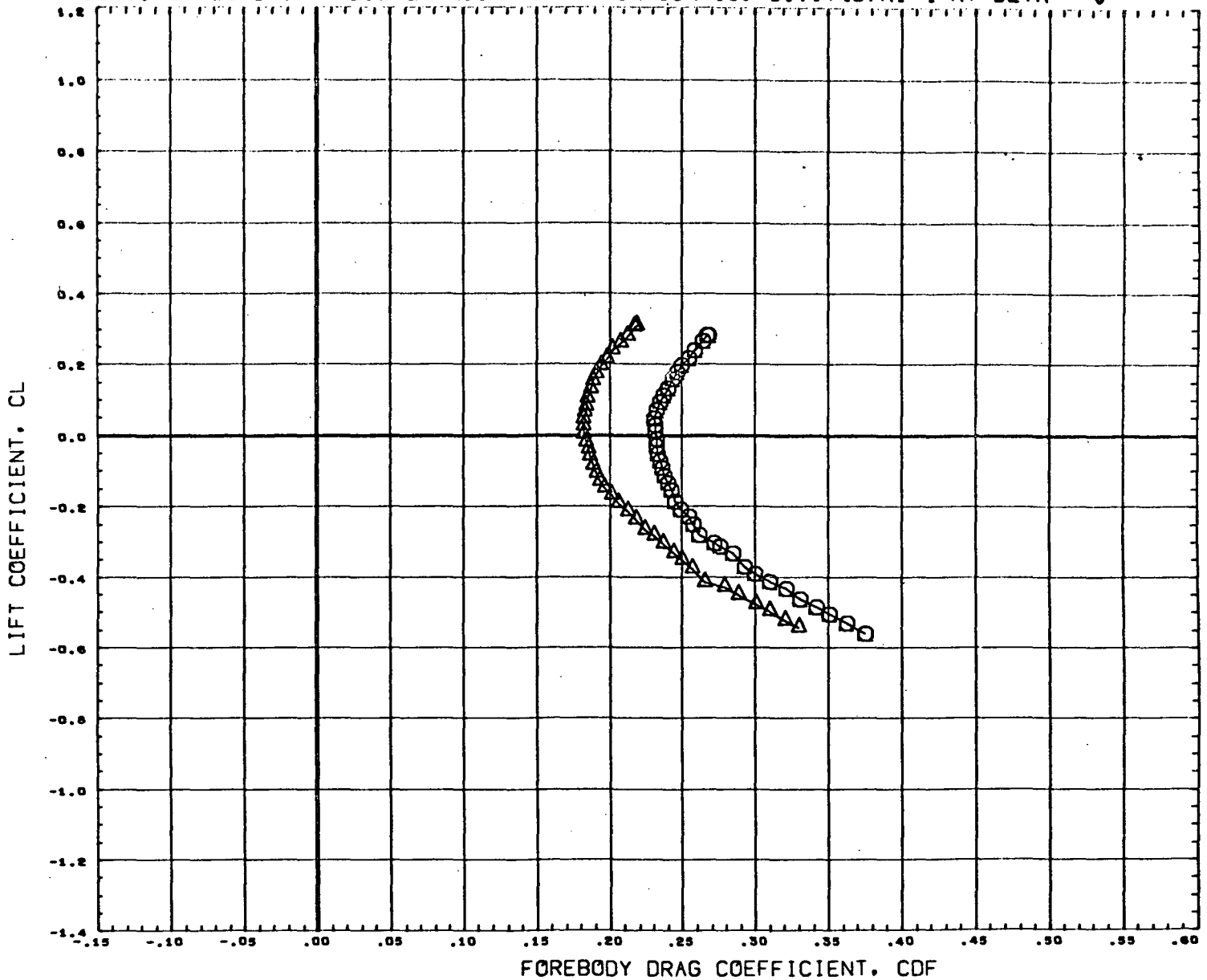


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	537.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

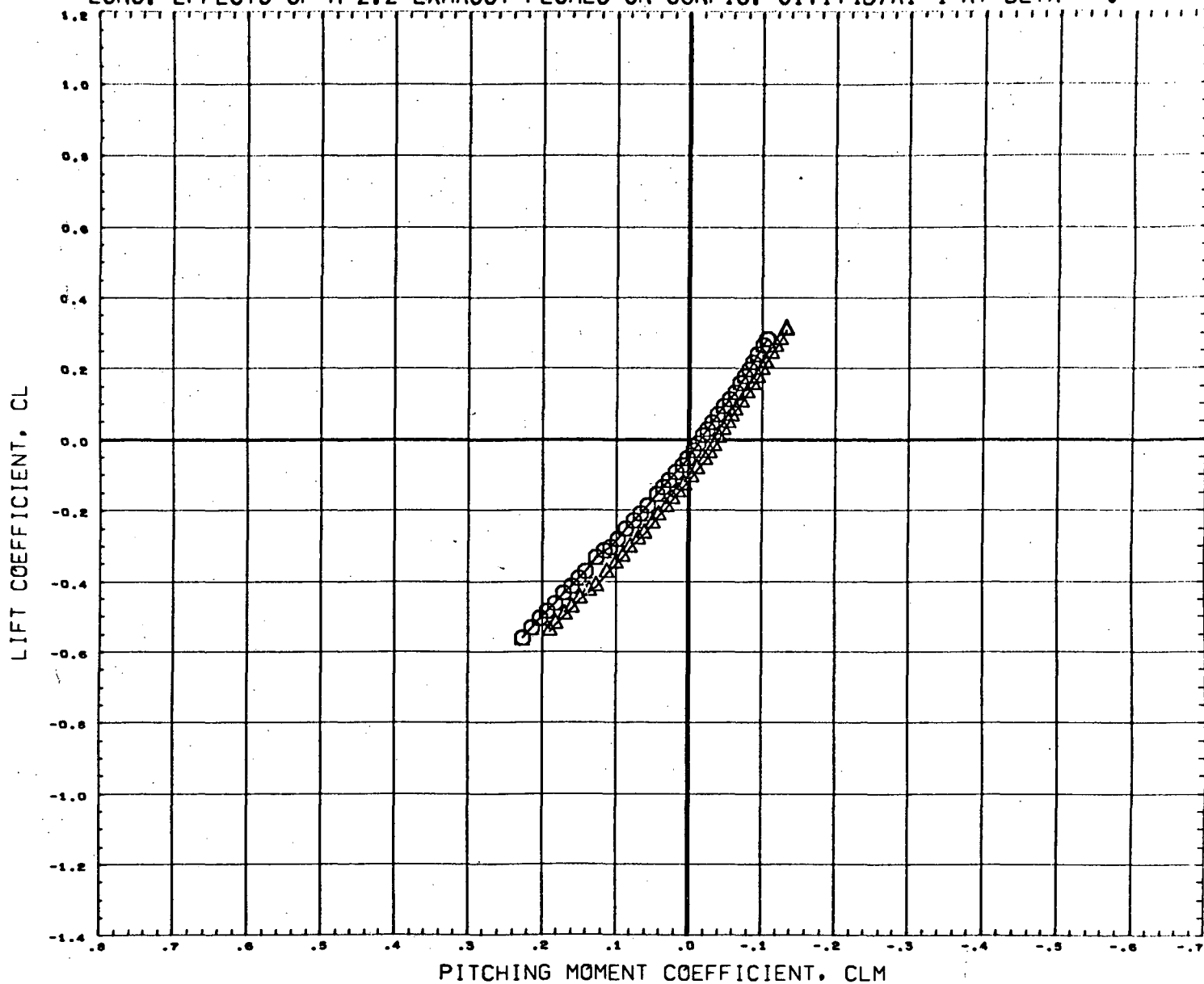


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07581)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						SREF	682.0004 IN.
						XMRF	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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LONG. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT BETA = 0

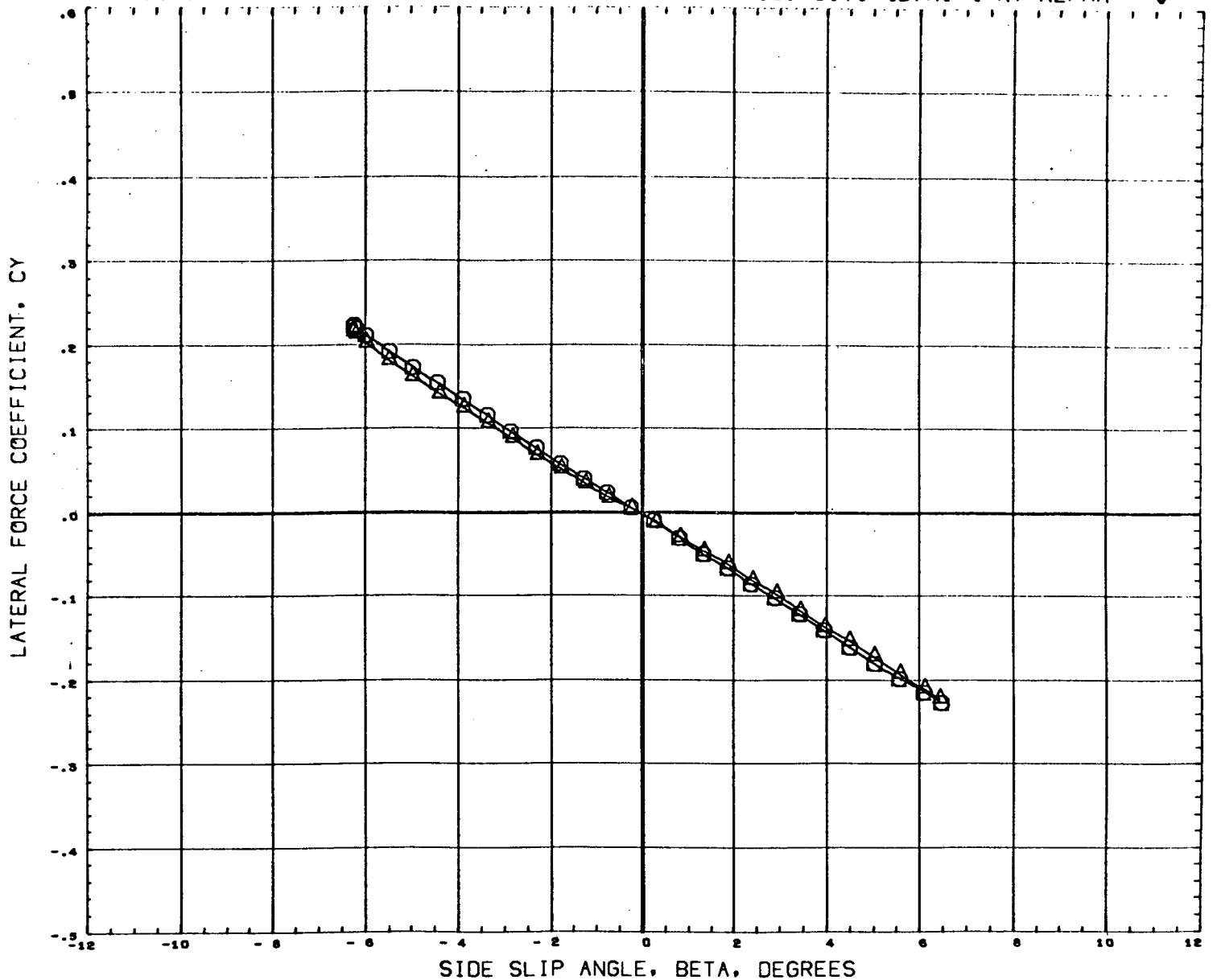


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7581)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(2,2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LAT-DIR. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT ALPHA = 0

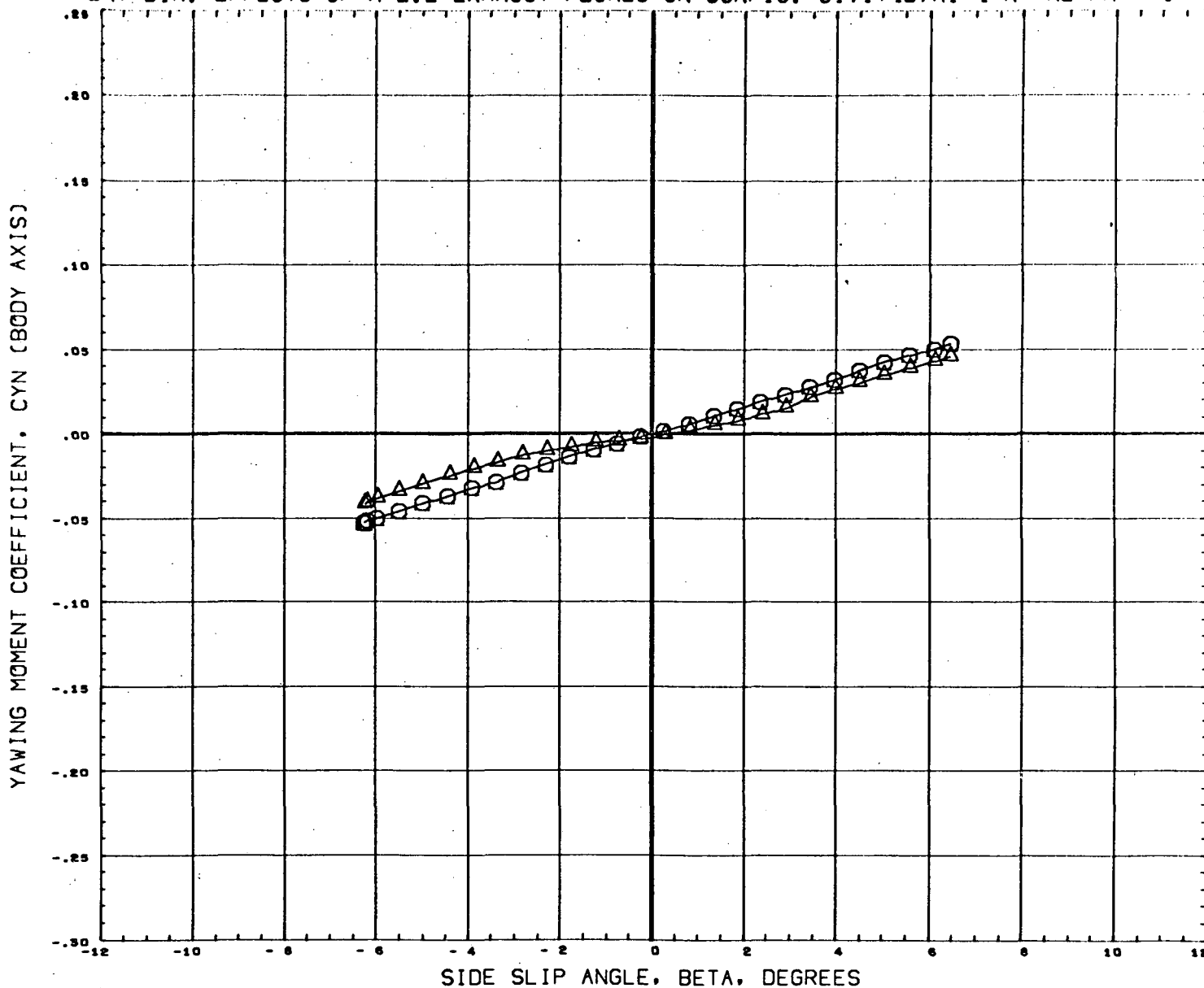


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7582)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LAT-DIR. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT ALPHA = 0

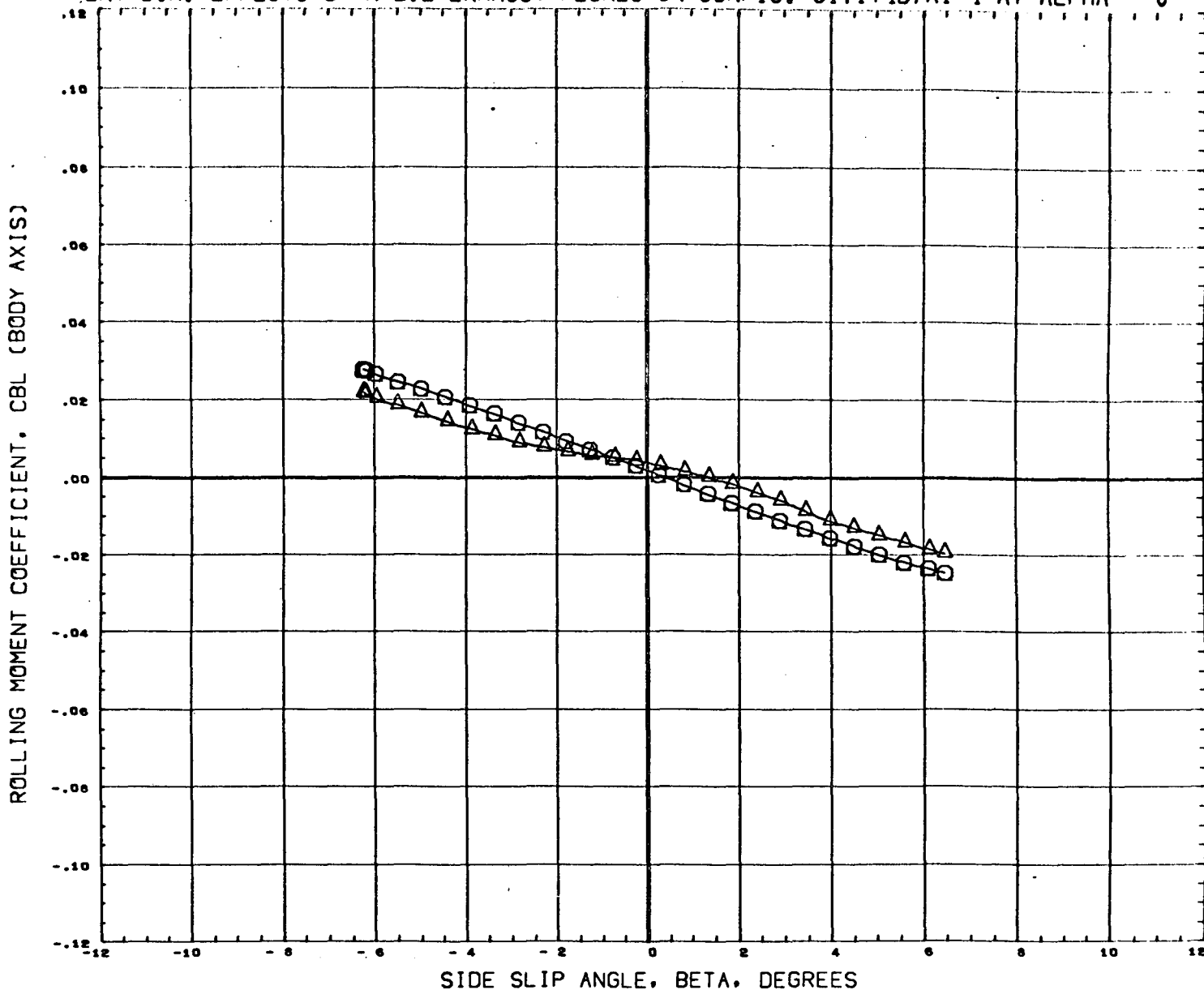


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(R07593)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(R07582)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# LAT-DIR. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT ALPHA = 0

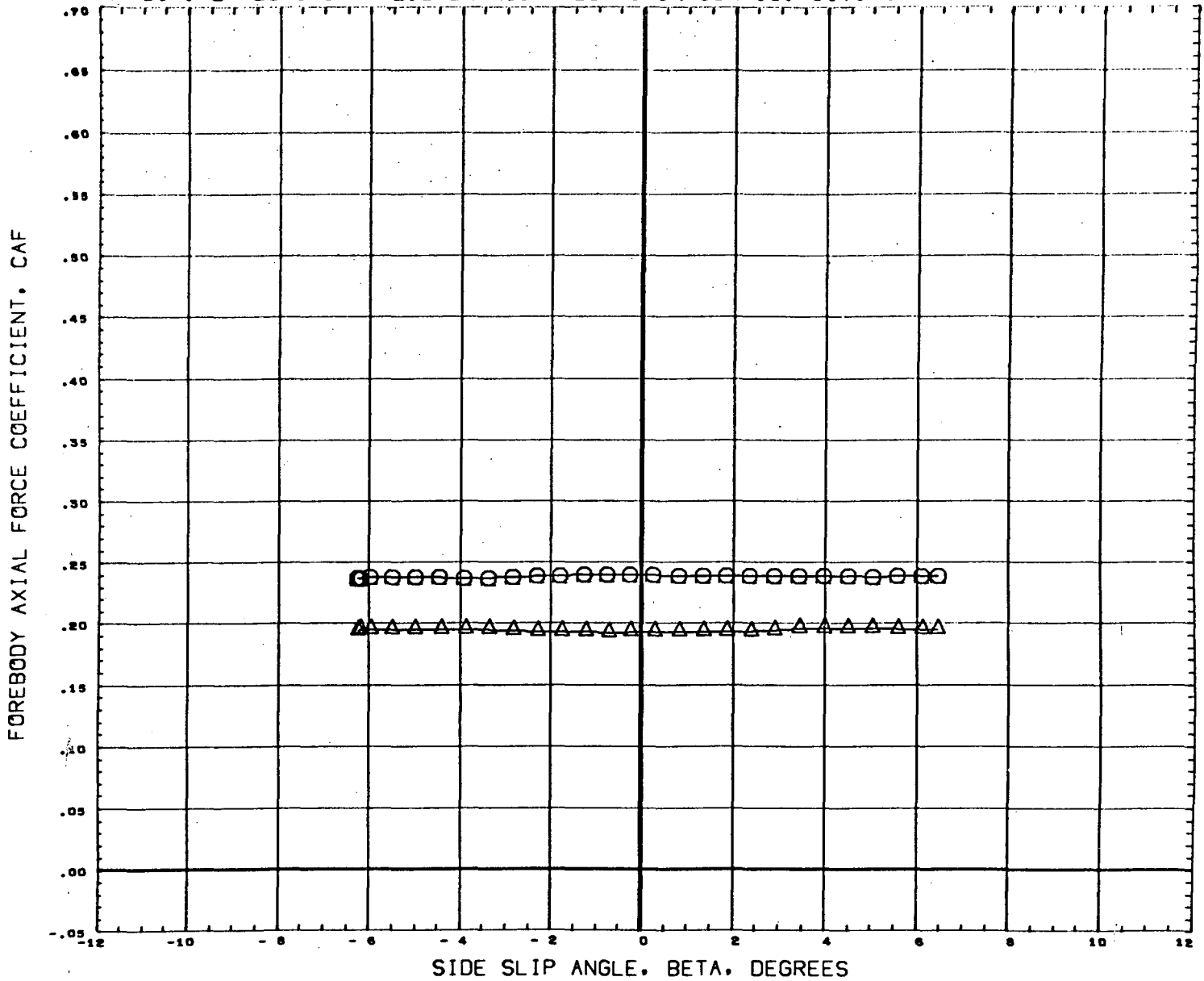


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7582)	MDAC S-222 COMPOSITE (T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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LAT-DIR. EFFECTS OF M=2.2 EXHAUST PLUMES ON CONFIG. 01V1T4B7A1-4 AT ALPHA = 0

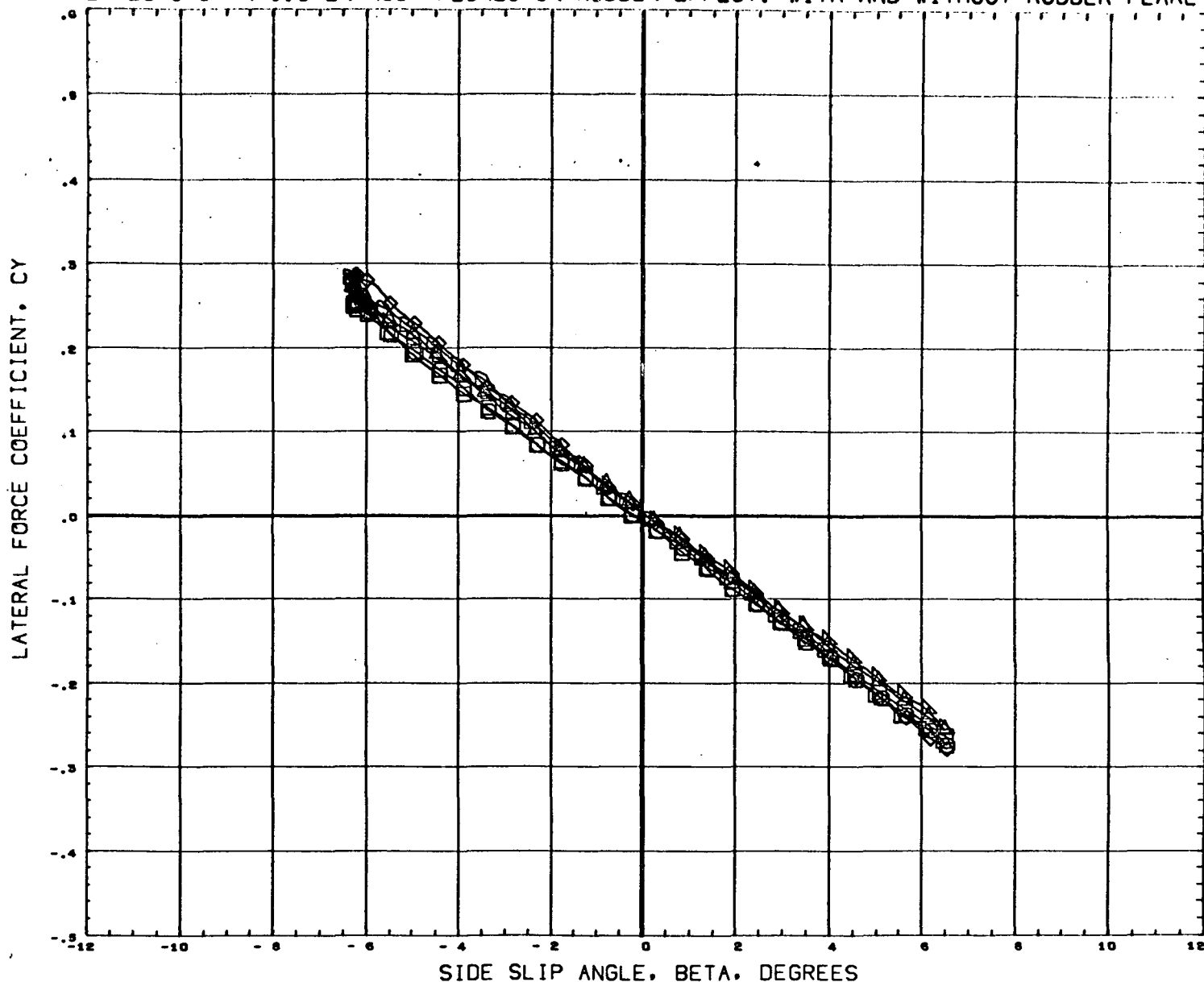


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7582)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE



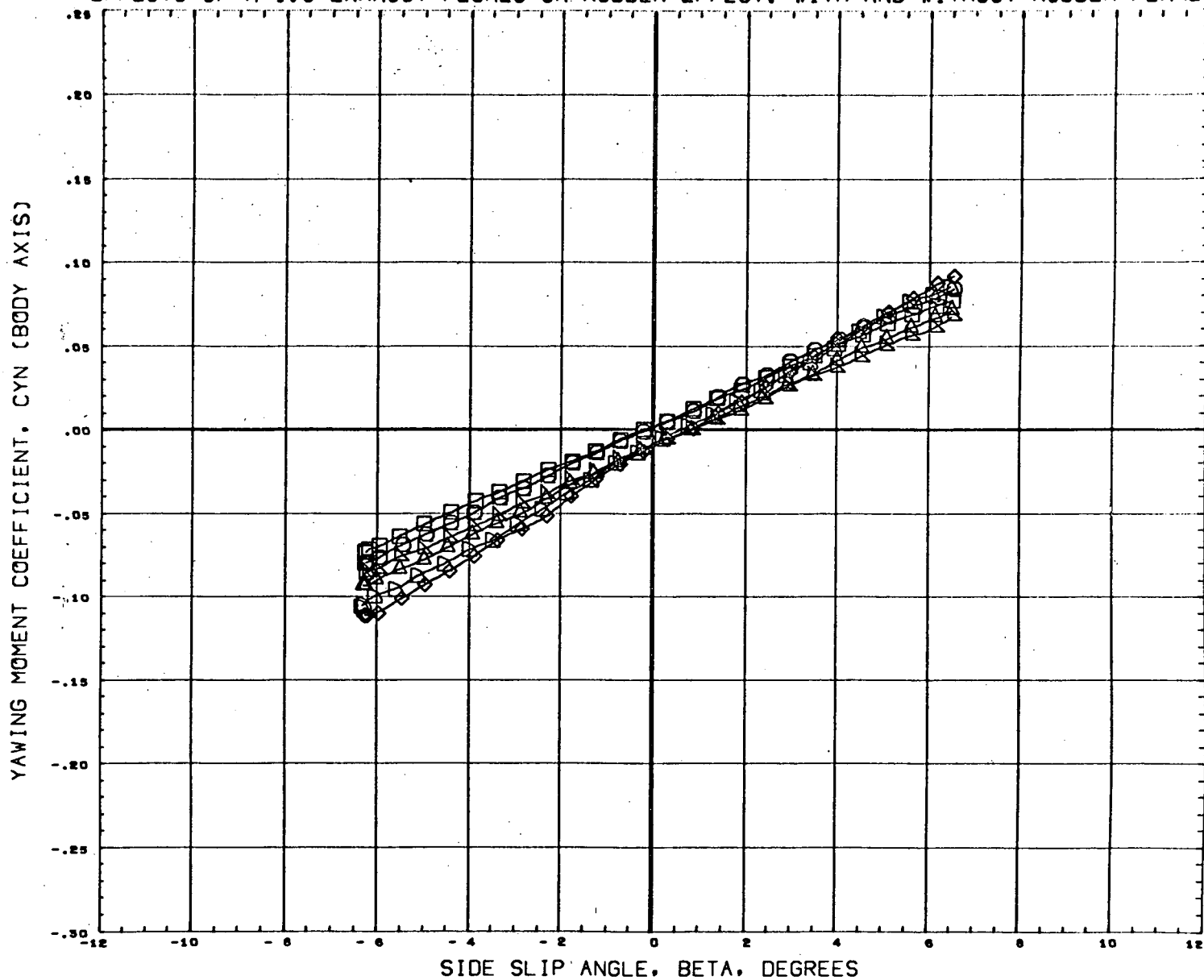
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(RD7593)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7595)	MDAC S-222 COMPOSITE(T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(RD7599)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(RD75A2)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRF	557.0004	IN.
(RD75A4)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	10.000	YMRF	0.0000	IN.
(RD75A8)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRF	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

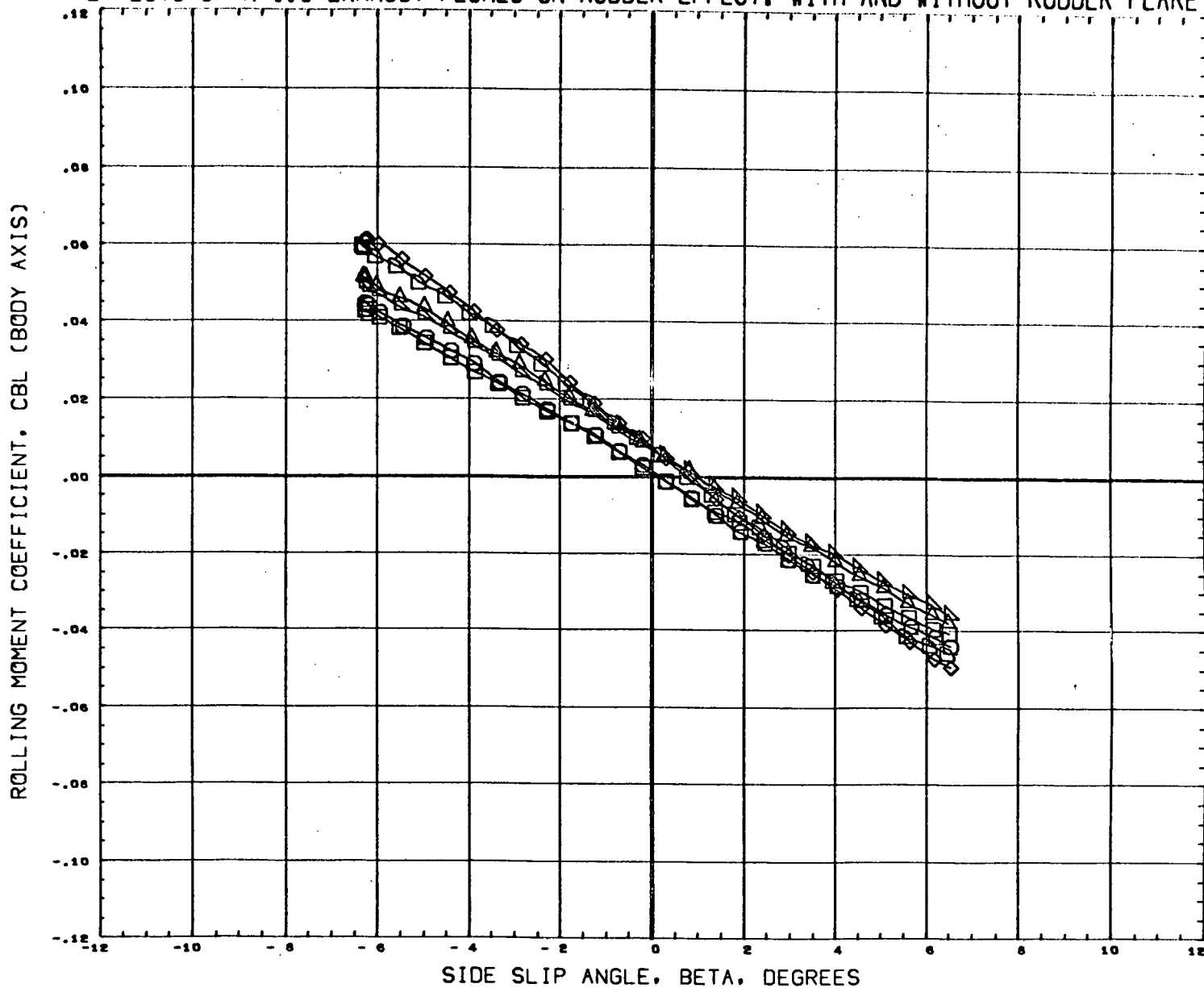


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUOFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7595)	MDAC S-222 COMPOSITE(T-CG) 01T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(RD75A2)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRR	557.0004 IN.
(RD75A4)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	10.000	YMRR	0.0000 IN.
(RD75A6)	MDAC S-222 COMPOSITE(T-CG) 01V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRR	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

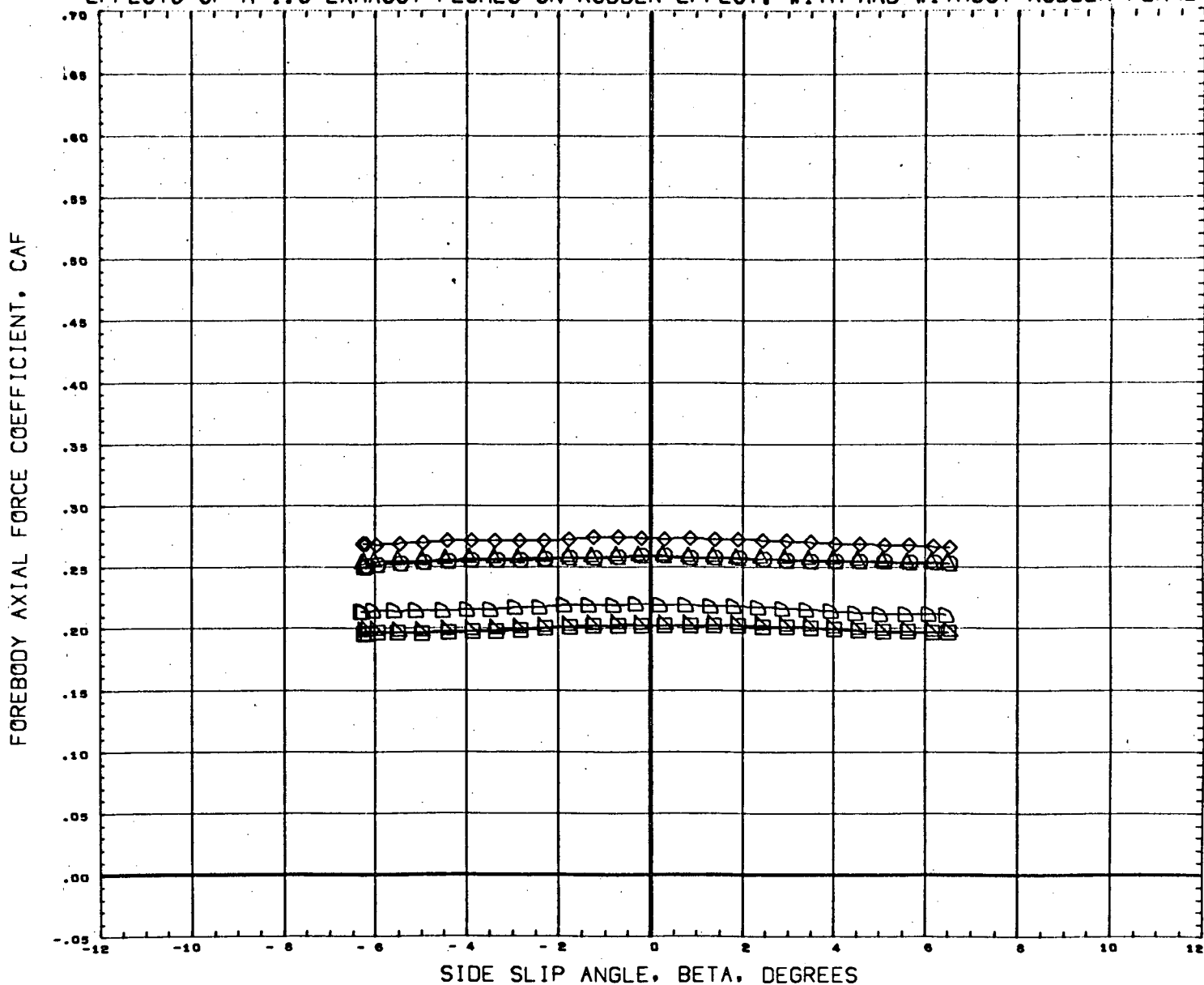


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(RD7593)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7595)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	809.5004	IN.
(RD7599)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(RD75A2)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004	IN.
(RD75A4)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	10.000	YMRP	0.0000	IN.
(RD75A6)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004	IN.
						SCALE	0.0060	

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE



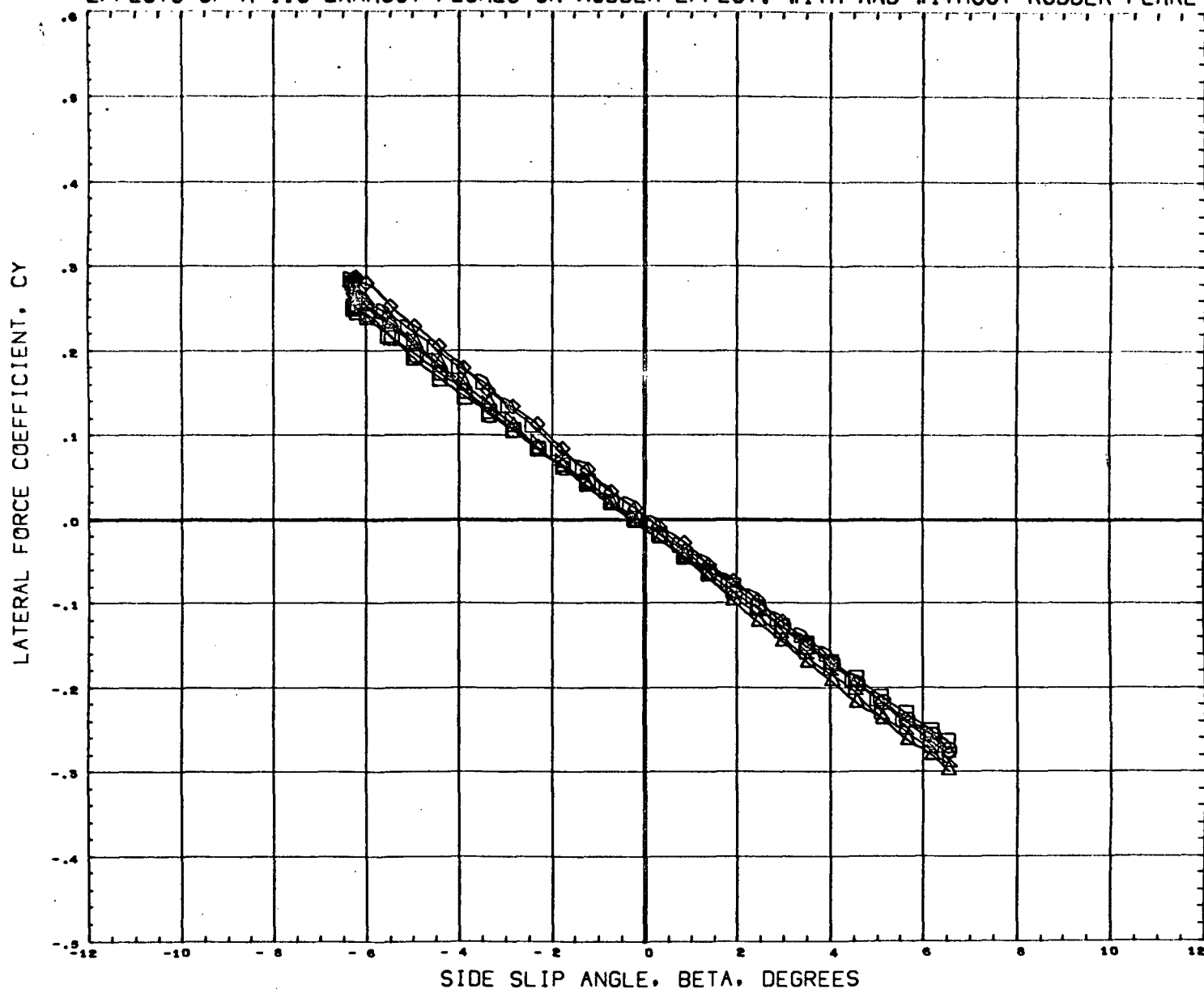
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7595)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	682.0004 IN.
(RD75A2)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(RD75A4)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	10.000	YMRP	0.0000 IN.
(RD75A6)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

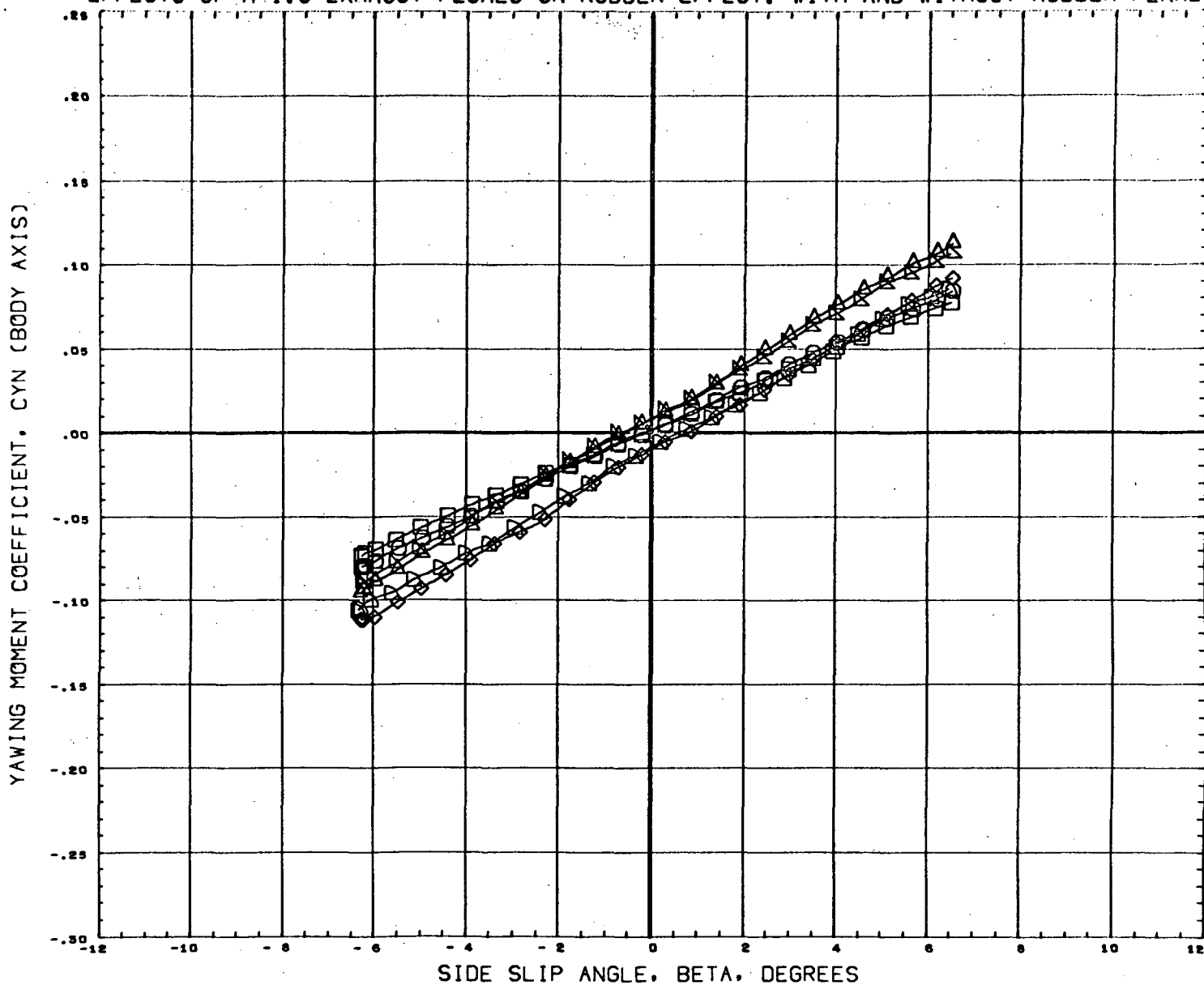


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(RD7593)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4	0.000	0.000	0.000	0.000	SREF	3155.5040	SQ.FT.
(RD7597)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(RD7599)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(RD75A2)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004	IN.
(RD75A6)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000	IN.
(RD75A8)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004	IN.
						SCALE	0.0060	

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

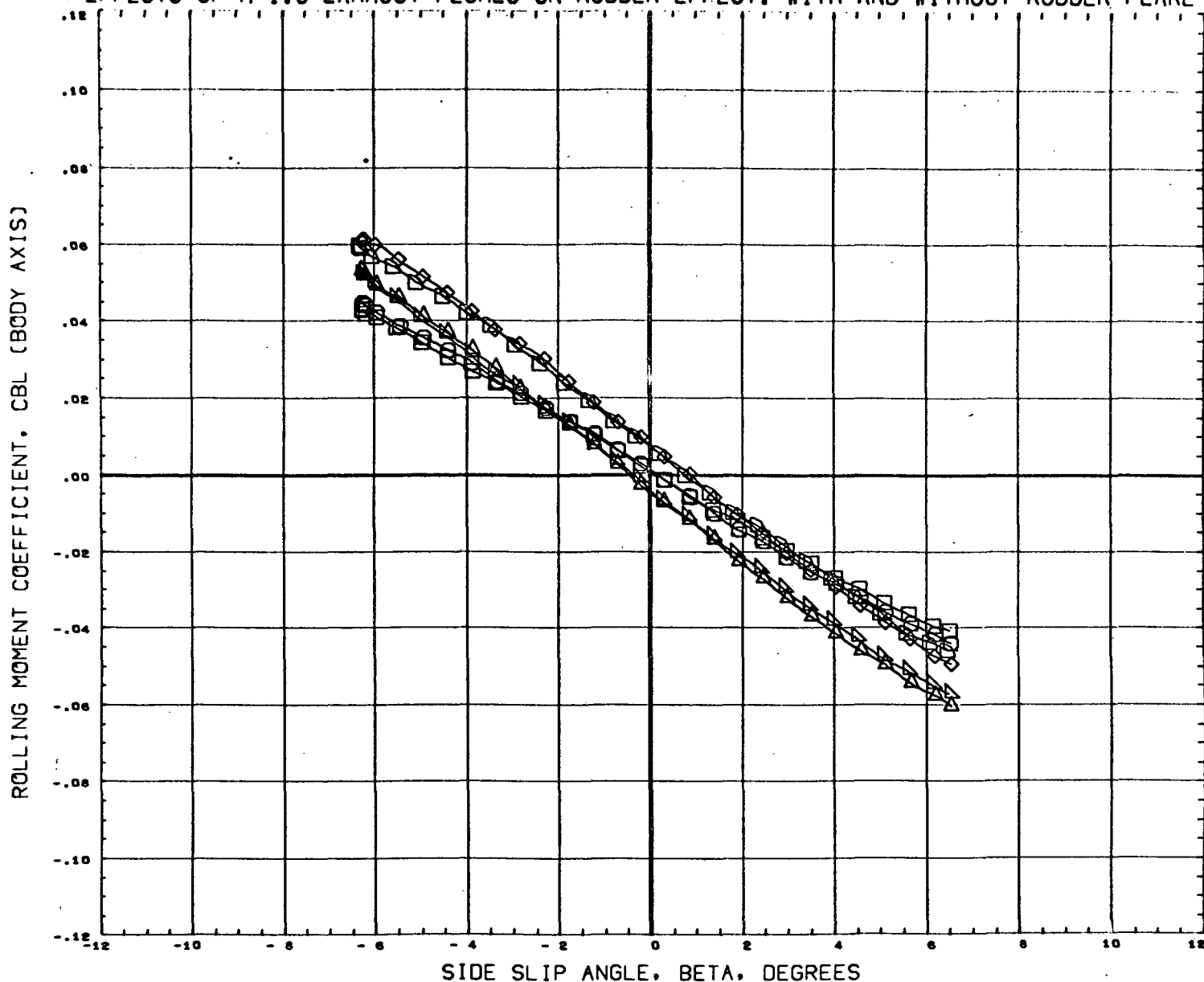


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7597)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(RD75A2)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(RD75A6)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(RD75A8)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE



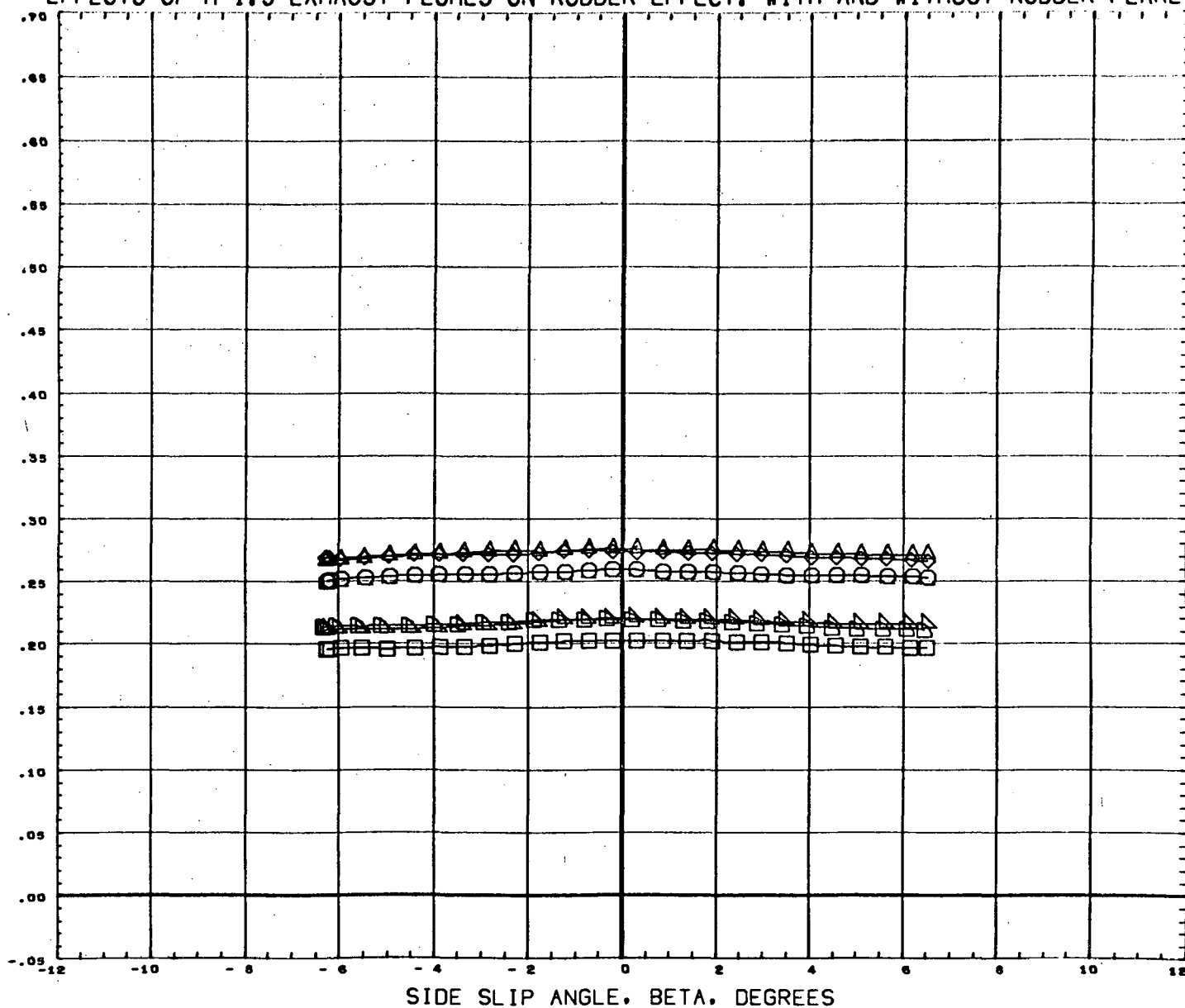
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7597)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(RD75A2)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(RD75A6)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(RD75A8)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

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# EFFECTS OF M=1.5 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

FOREBODY AXIAL FORCE COEFFICIENT, CAF

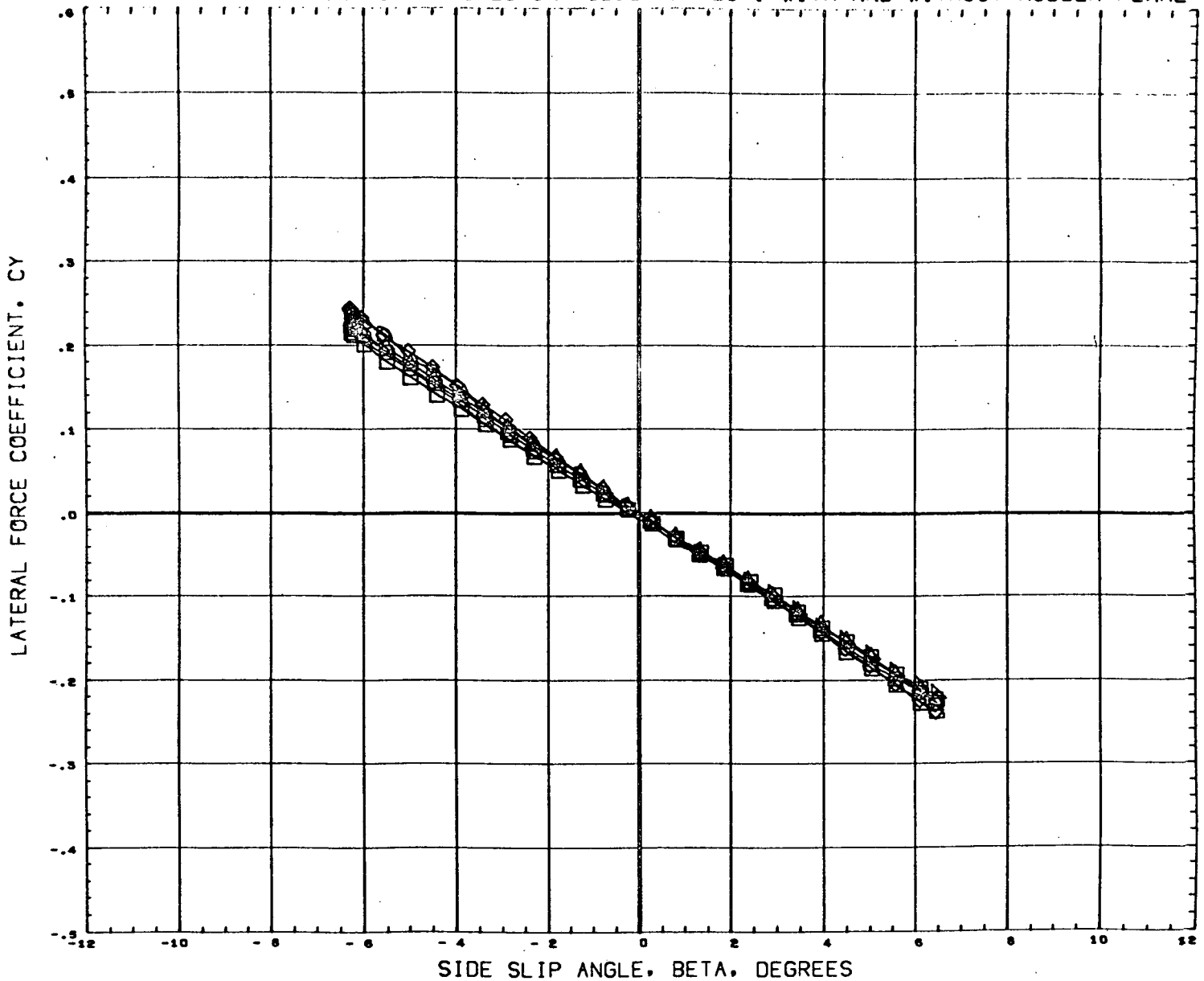


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7597)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(RD75A2)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRF	537.0004 IN.
(RD75A6)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRF	0.0000 IN.
(RD75A6)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT, WITH AND WITHOUT RUDDER FLARE



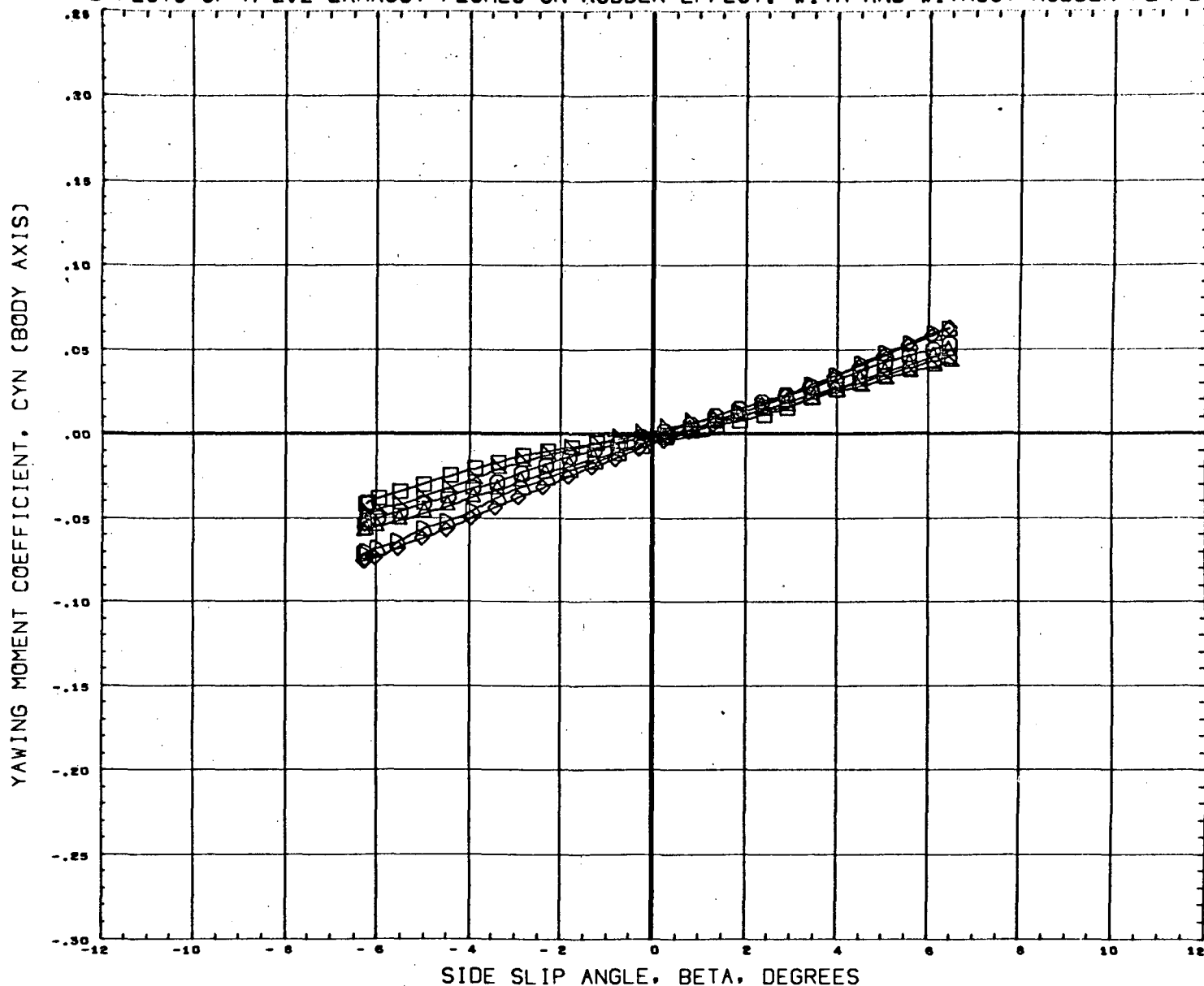
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(RD7593)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7595)	MDAC S-222 COMPOSITE(T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(RD7599)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(RD7582)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XHRP	557.0004	IN.
(RD7584)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YHRP	0.0000	IN.
(RD7588)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZHRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

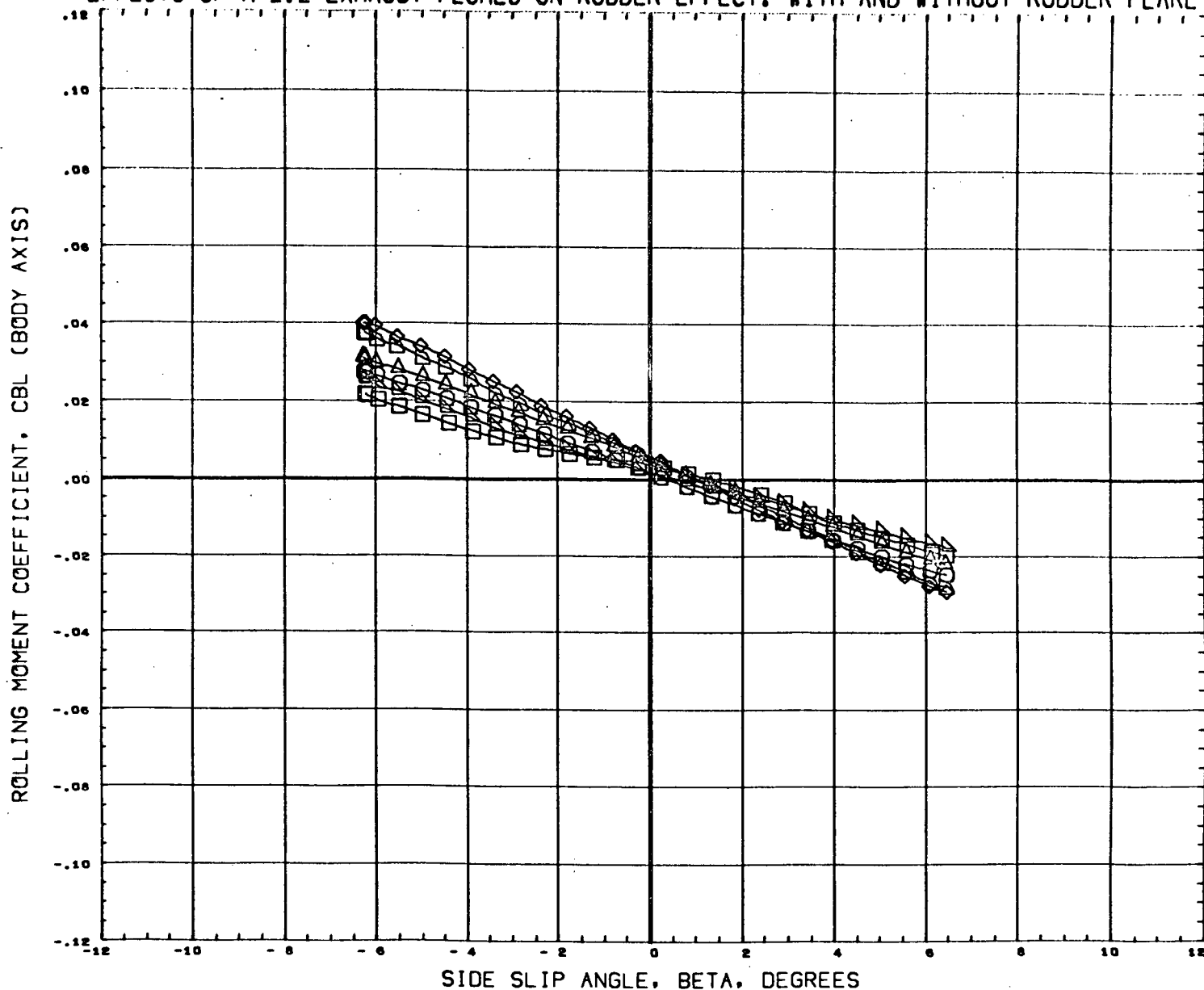


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7595)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(RD7582)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(RD7584)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	0.000	10.000	YMRP	0.0000 IN.
(RD7586)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

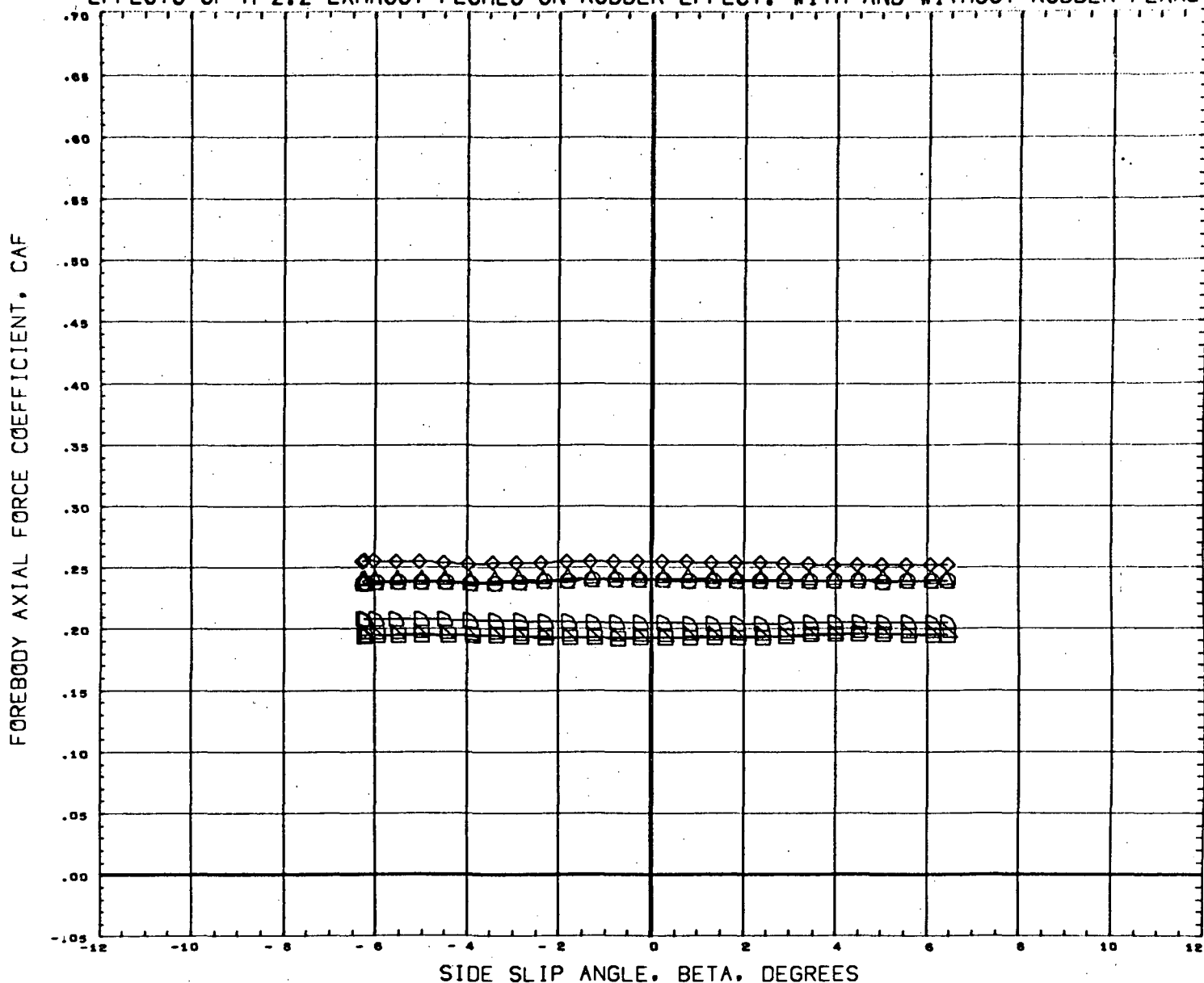


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7595)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	682.0004 IN.
(RD7582)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(RD7584)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRP	0.0000 IN.
(RD7586)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

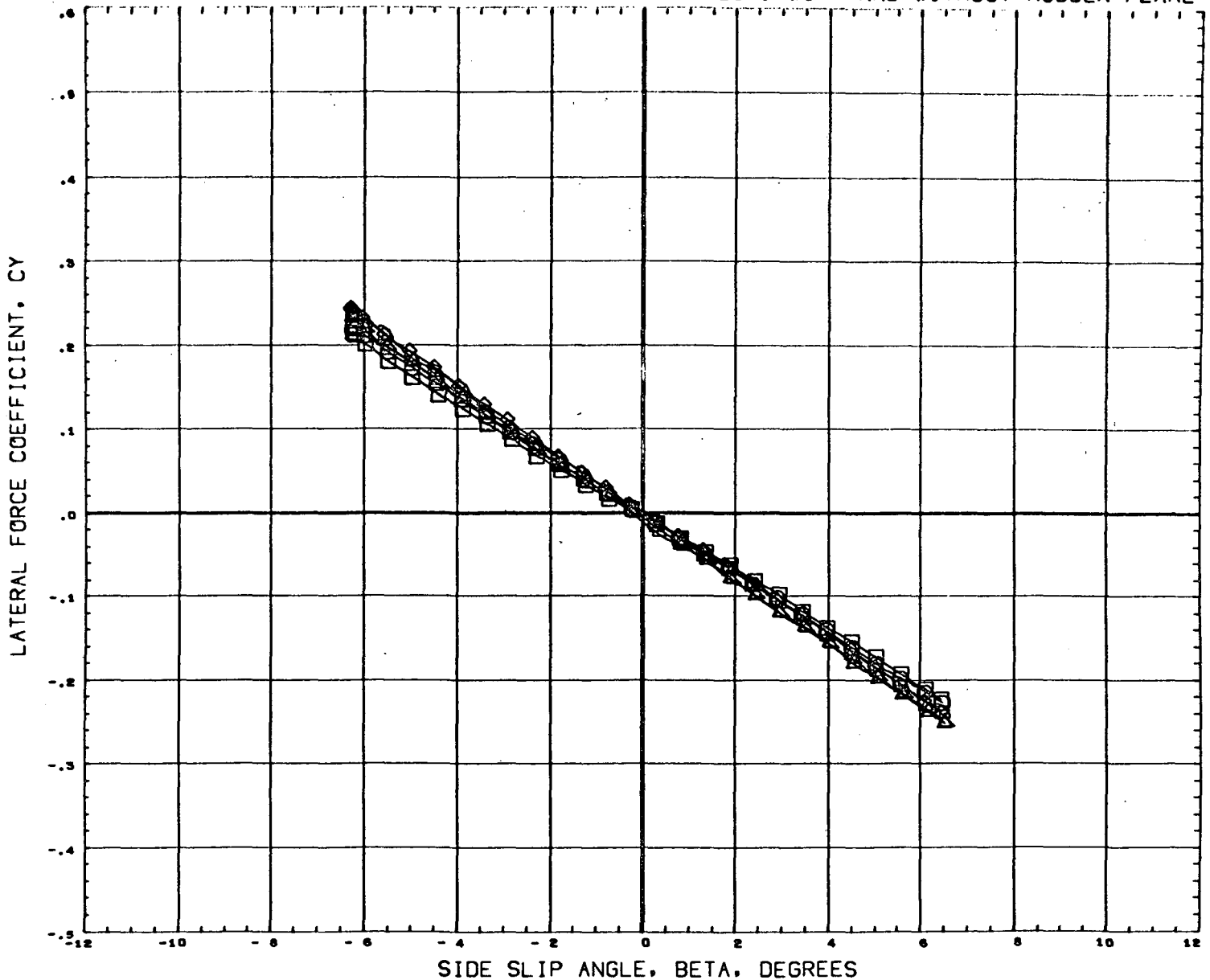


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7595)	MDAC S-222 COMPOSITE(T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	862.0004 IN.
(RD7582)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRF	557.0004 IN.
(RD7584)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRF	0.0000 IN.
(RD7586)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

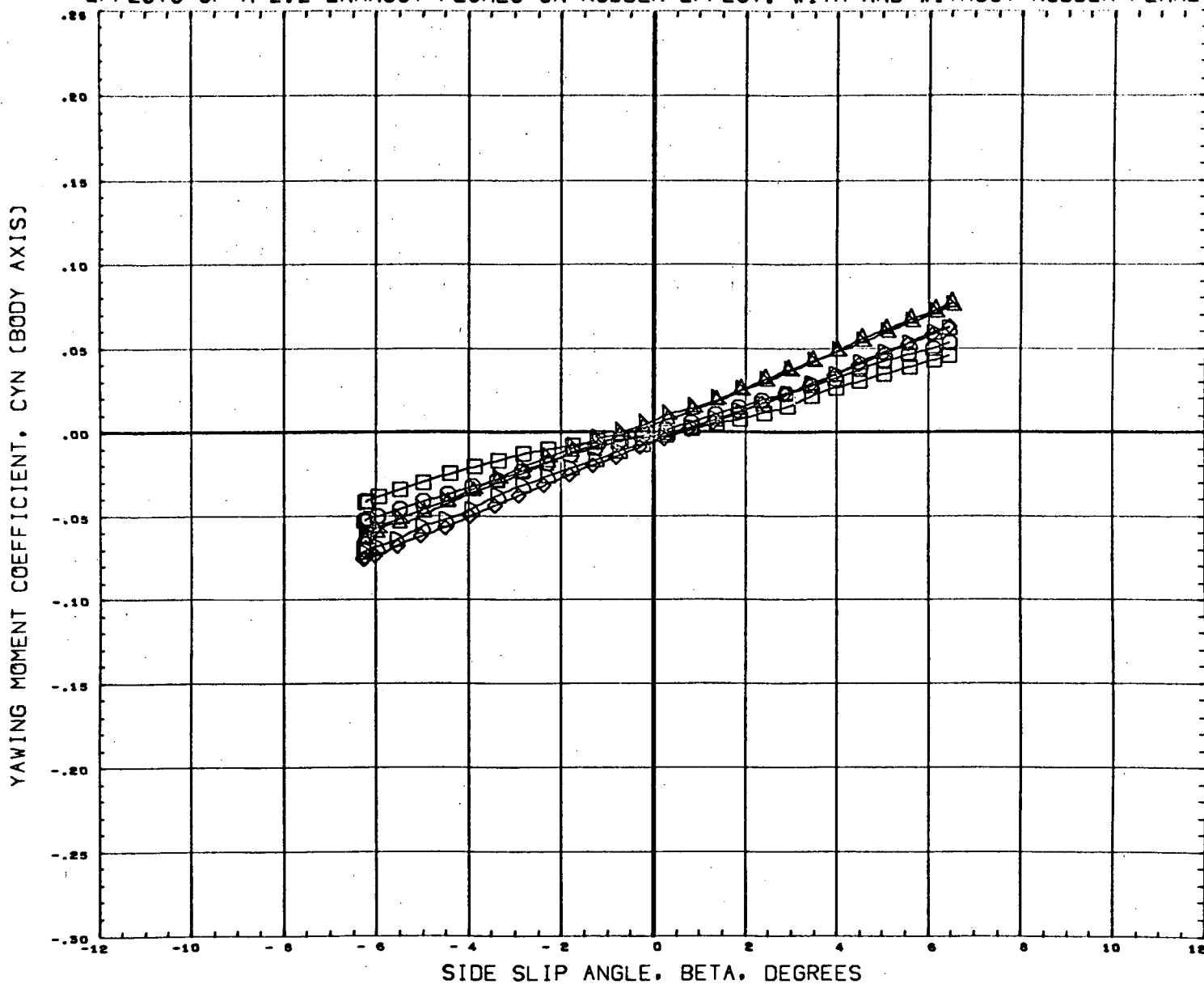


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(RD7593)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7597)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	809.5004	IN.
(RD7599)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(RD7582)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004	IN.
(RD7586)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000	IN.
(RD7586)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

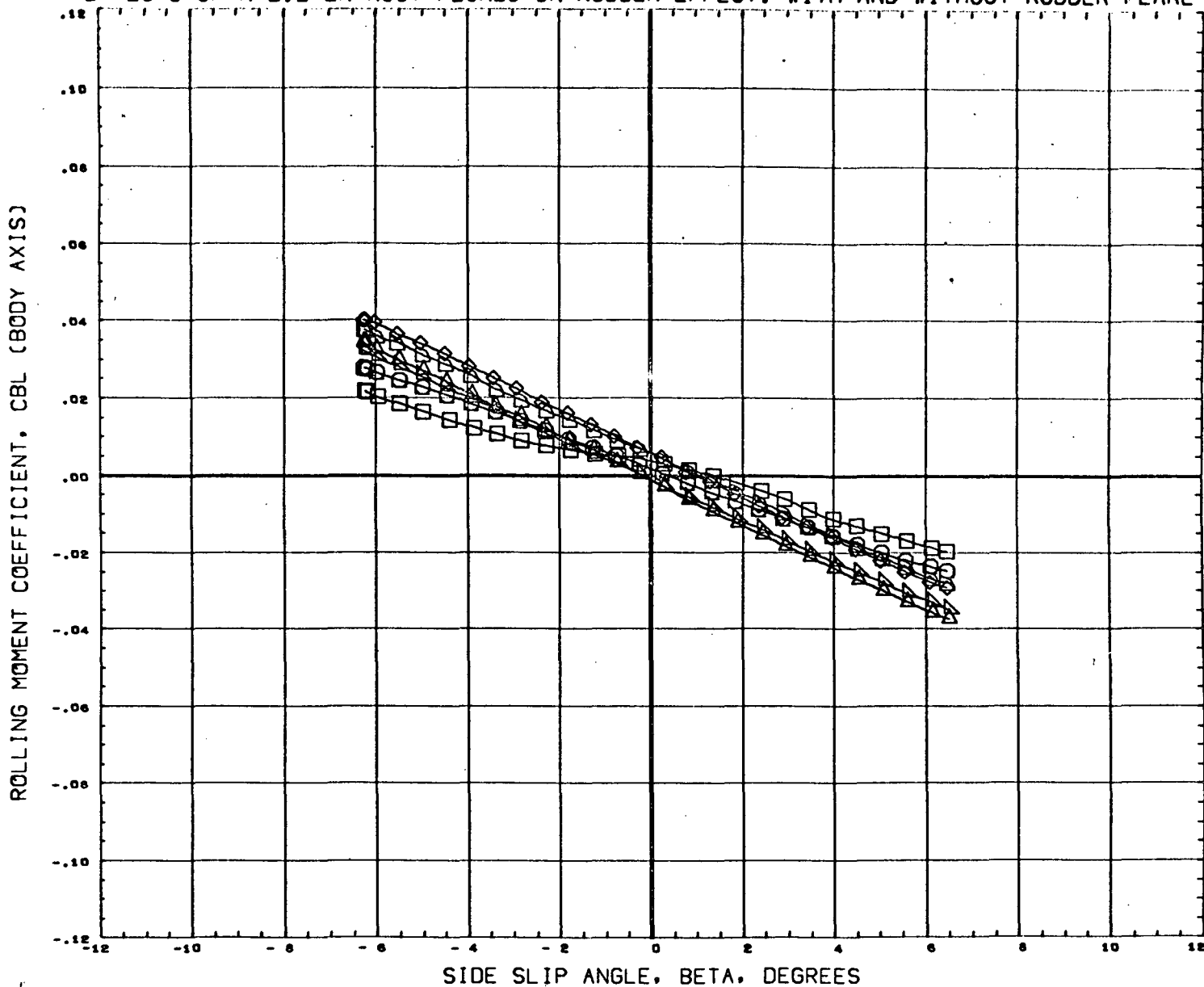


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7597)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(RD7582)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(RD7586)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(RD7588)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT, WITH AND WITHOUT RUDDER FLARE



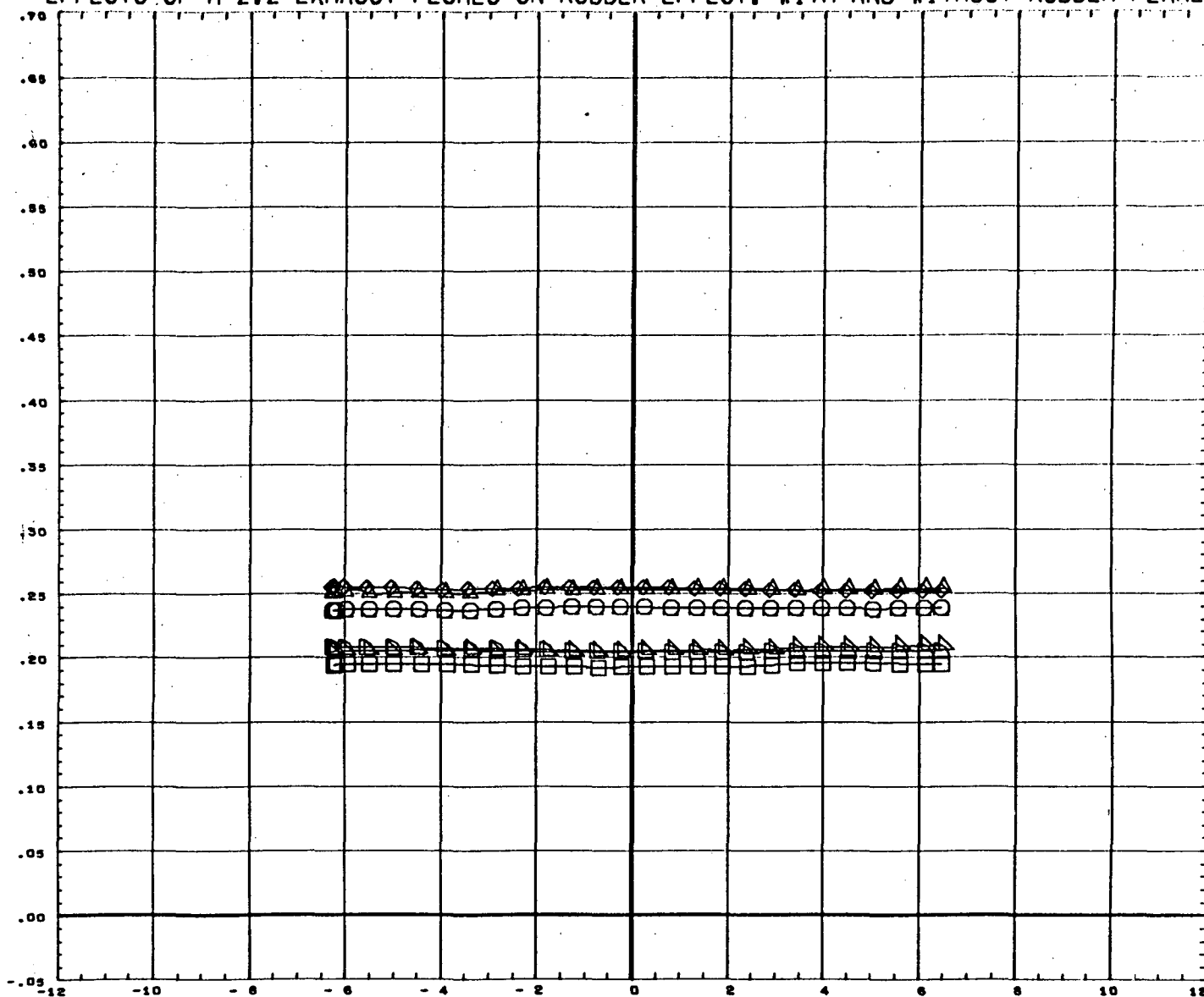
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(RD7593)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(RD7597)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(RD7599)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(RD7582)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	0.000	0.000	XMRP	557.0004	IN.
(RD7586)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	20.000	0.000	YMRP	0.0000	IN.
(RD7588)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	20.000	10.000	ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

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# EFFECTS OF M=2.2 EXHAUST PLUMES ON RUDDER EFFECT. WITH AND WITHOUT RUDDER FLARE

FOREBODY AXIAL FORCE COEFFICIENT, CAF



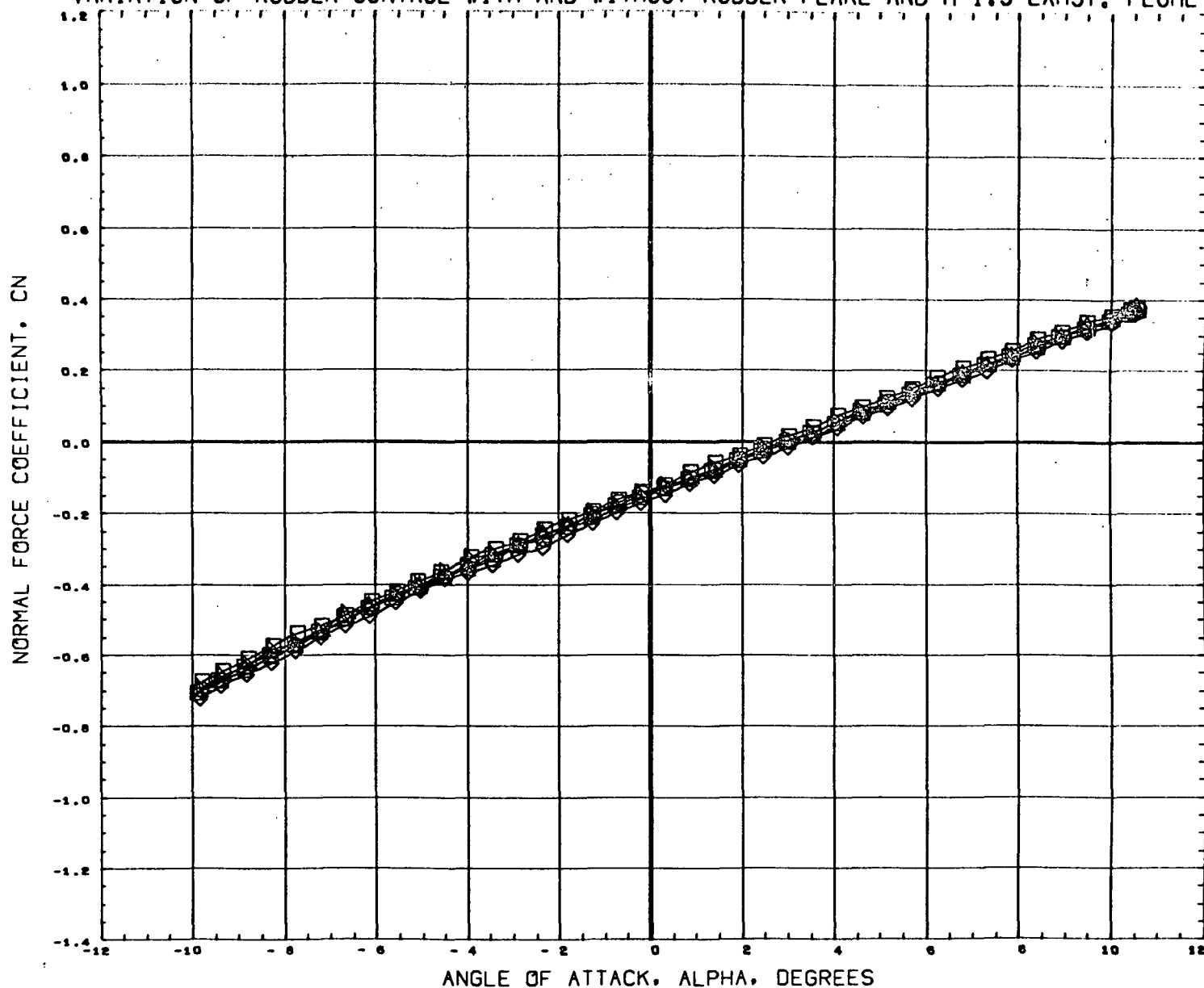
SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(RD7593)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7597)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(RD7599)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(RD7582)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(RD7586)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(RD7588)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



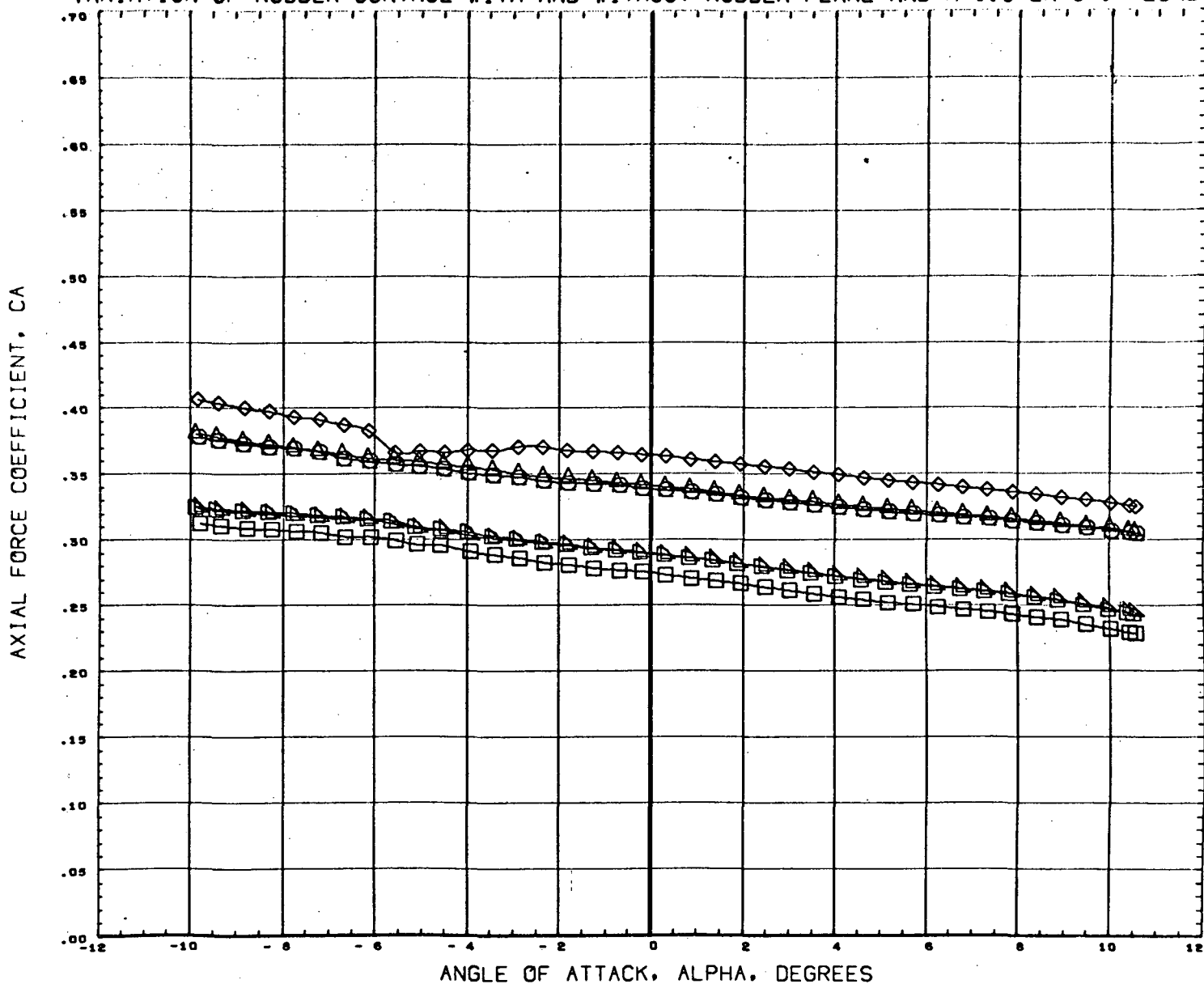
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A3)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



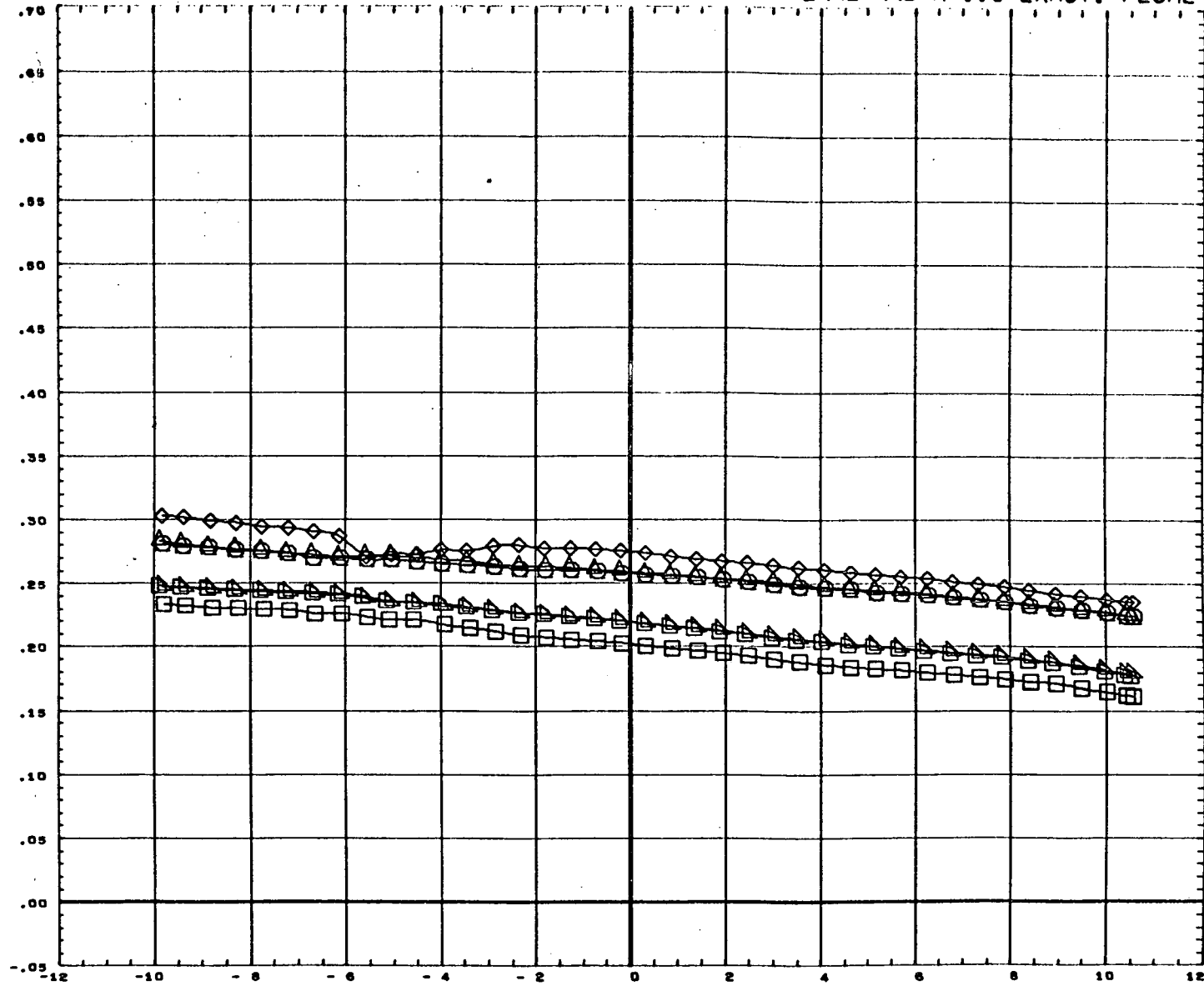
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	662.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRF	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRF	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

FOREBODY AXIAL FORCE COEFFICIENT, CAF



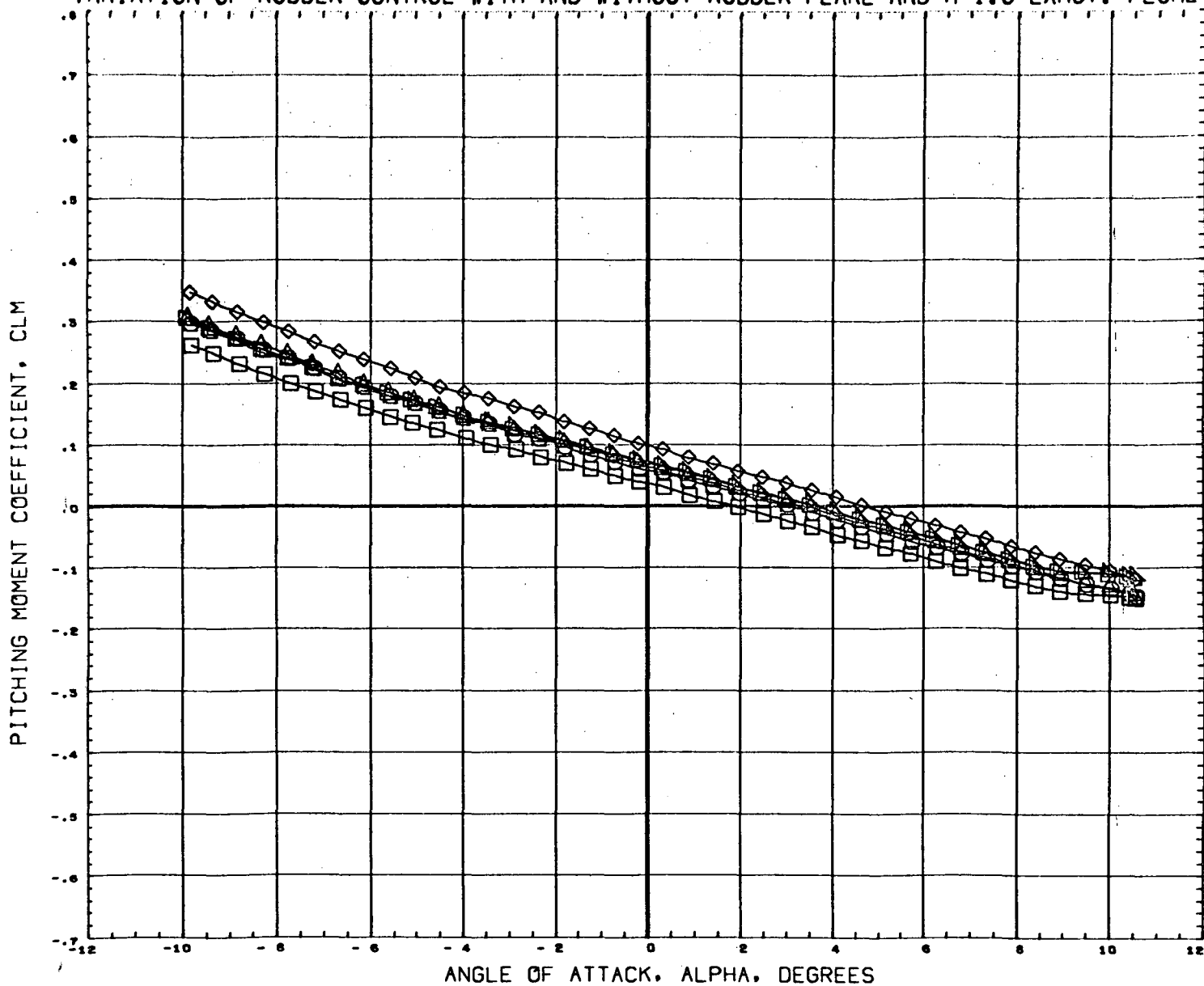
ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE(T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRF	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRF	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



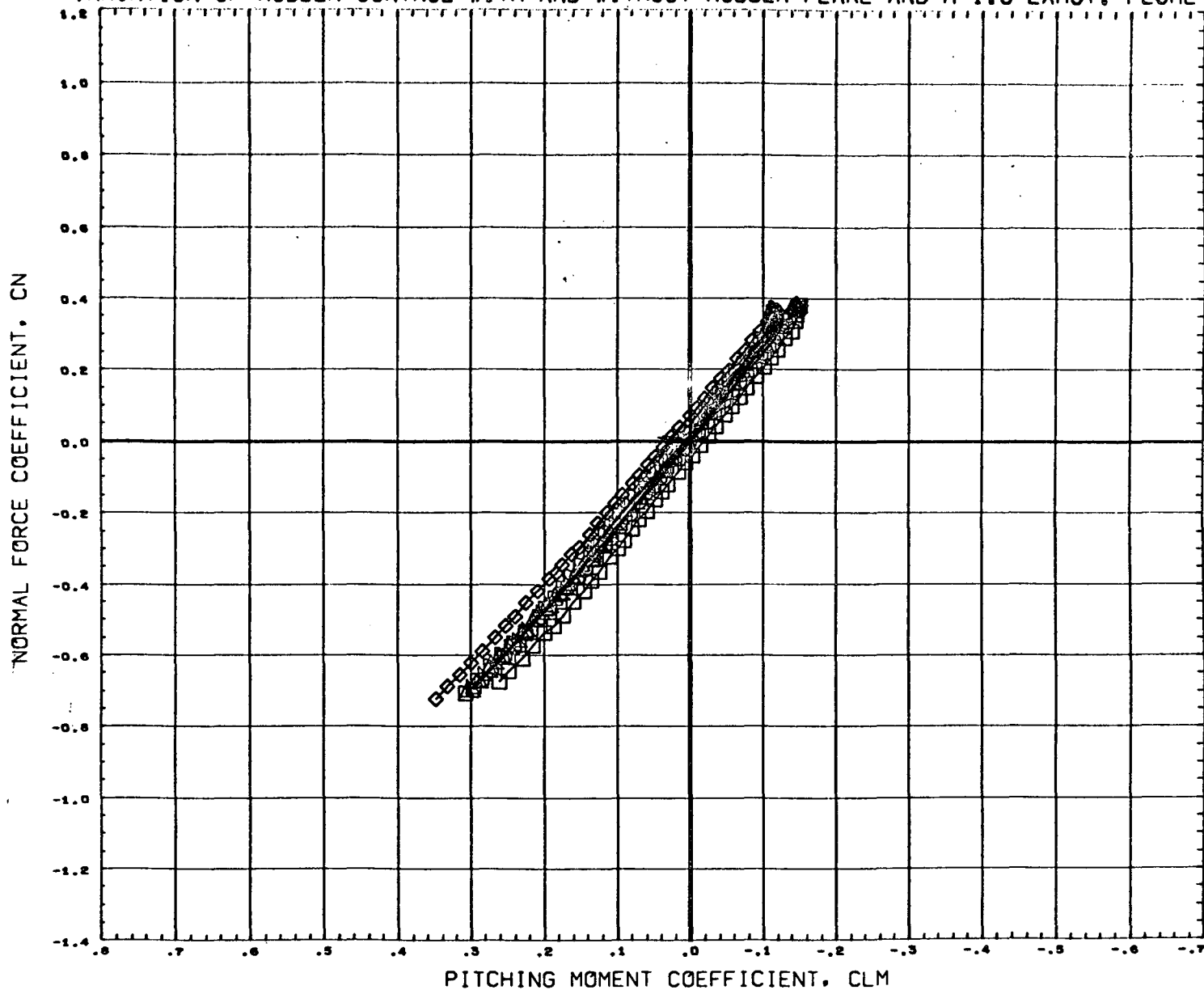
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

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PAGE 265

# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

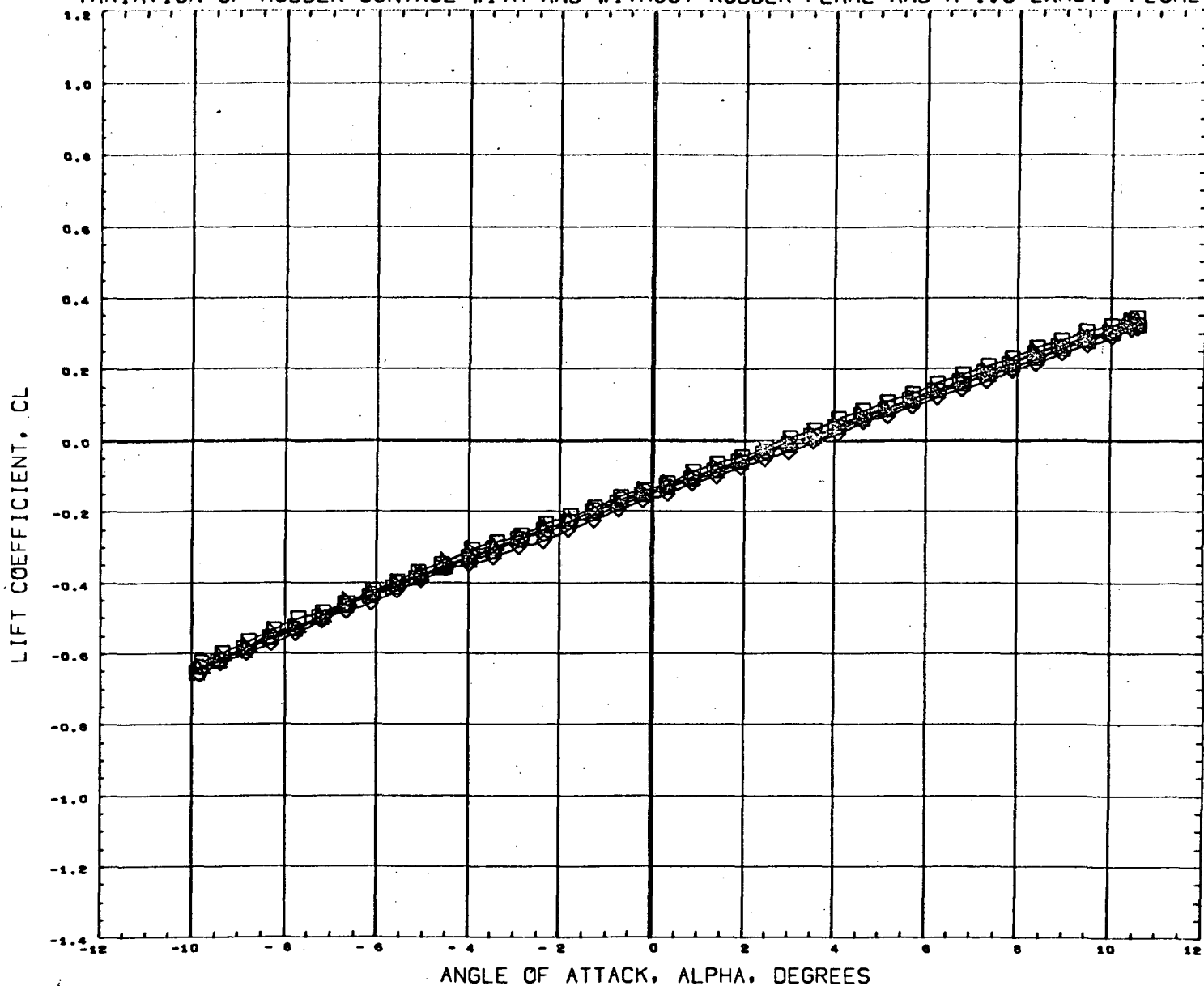


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE(T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



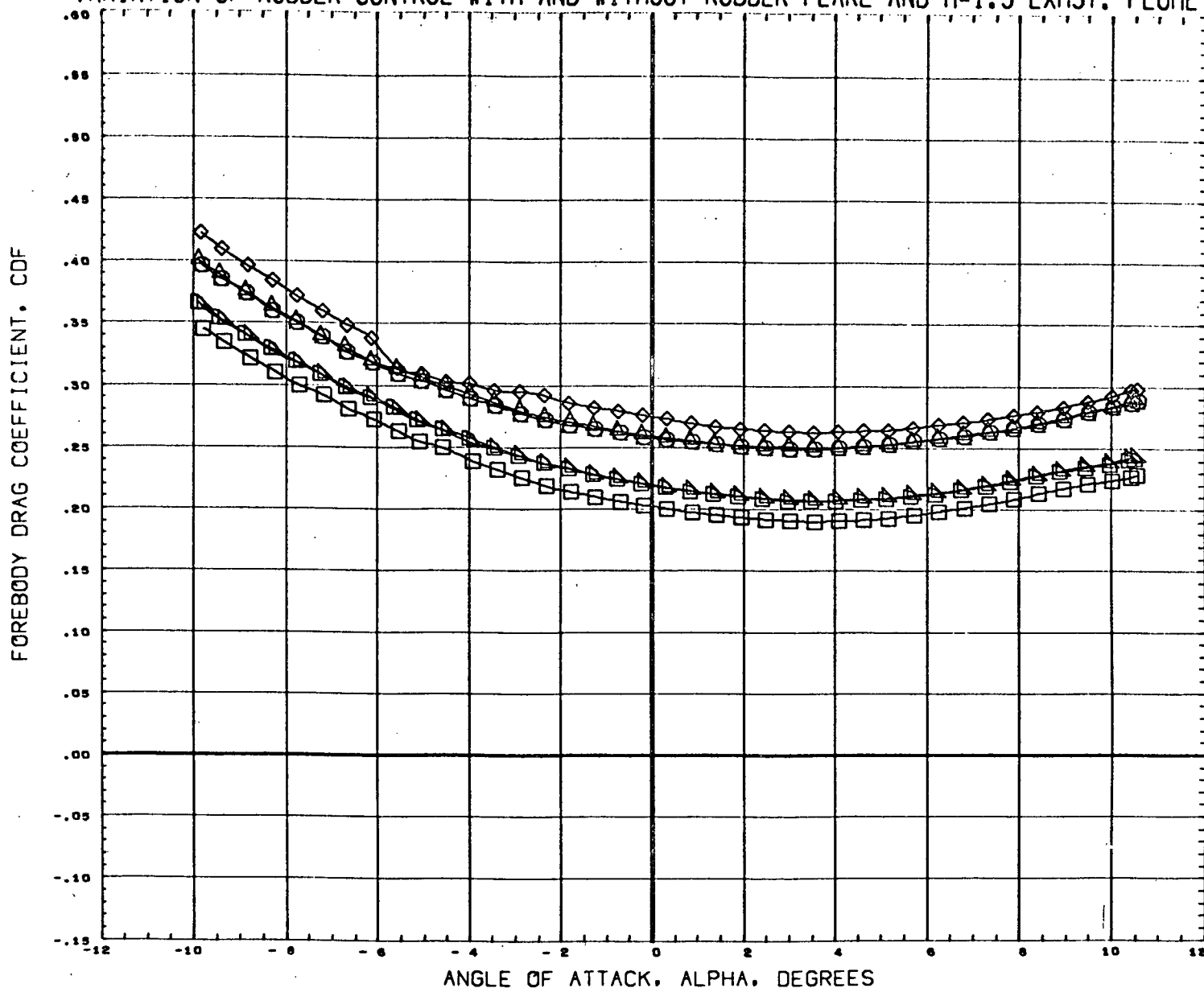
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

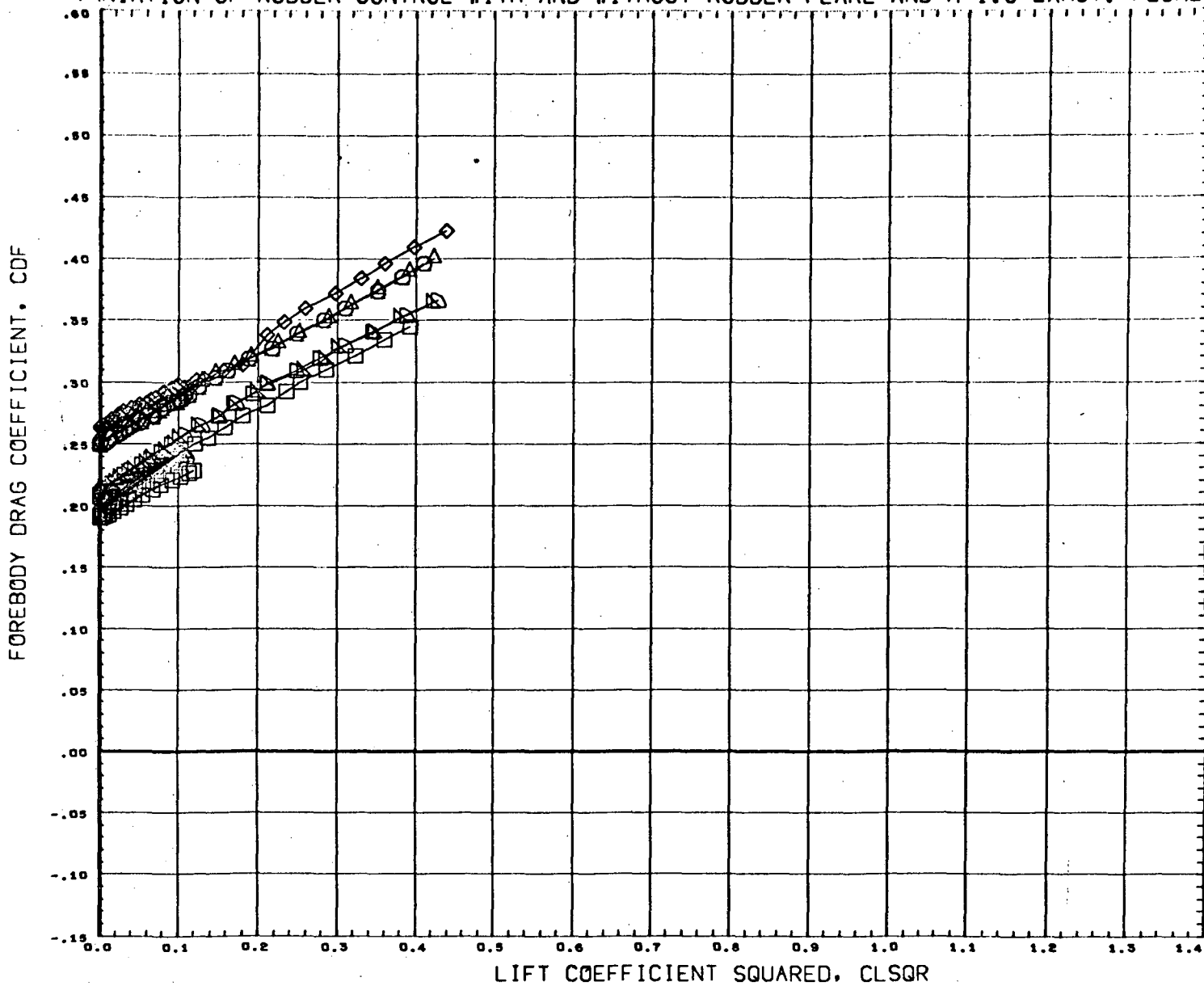


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF 609.9004 IN.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF 882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP 557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP 0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP 200.0004 IN.
						SCALE 0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



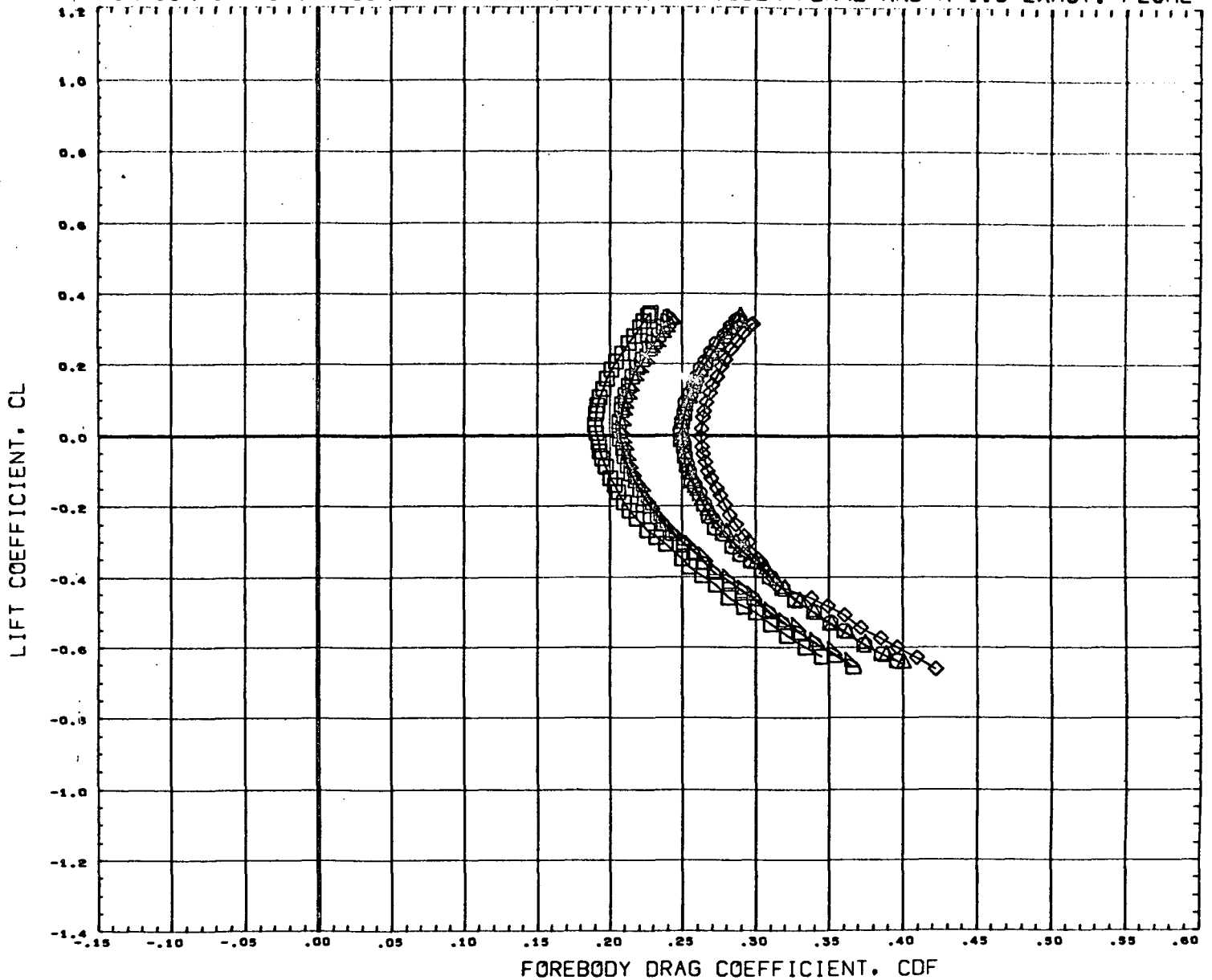
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	50.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	SREF	882.0004	IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004	IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000	IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH

1.51

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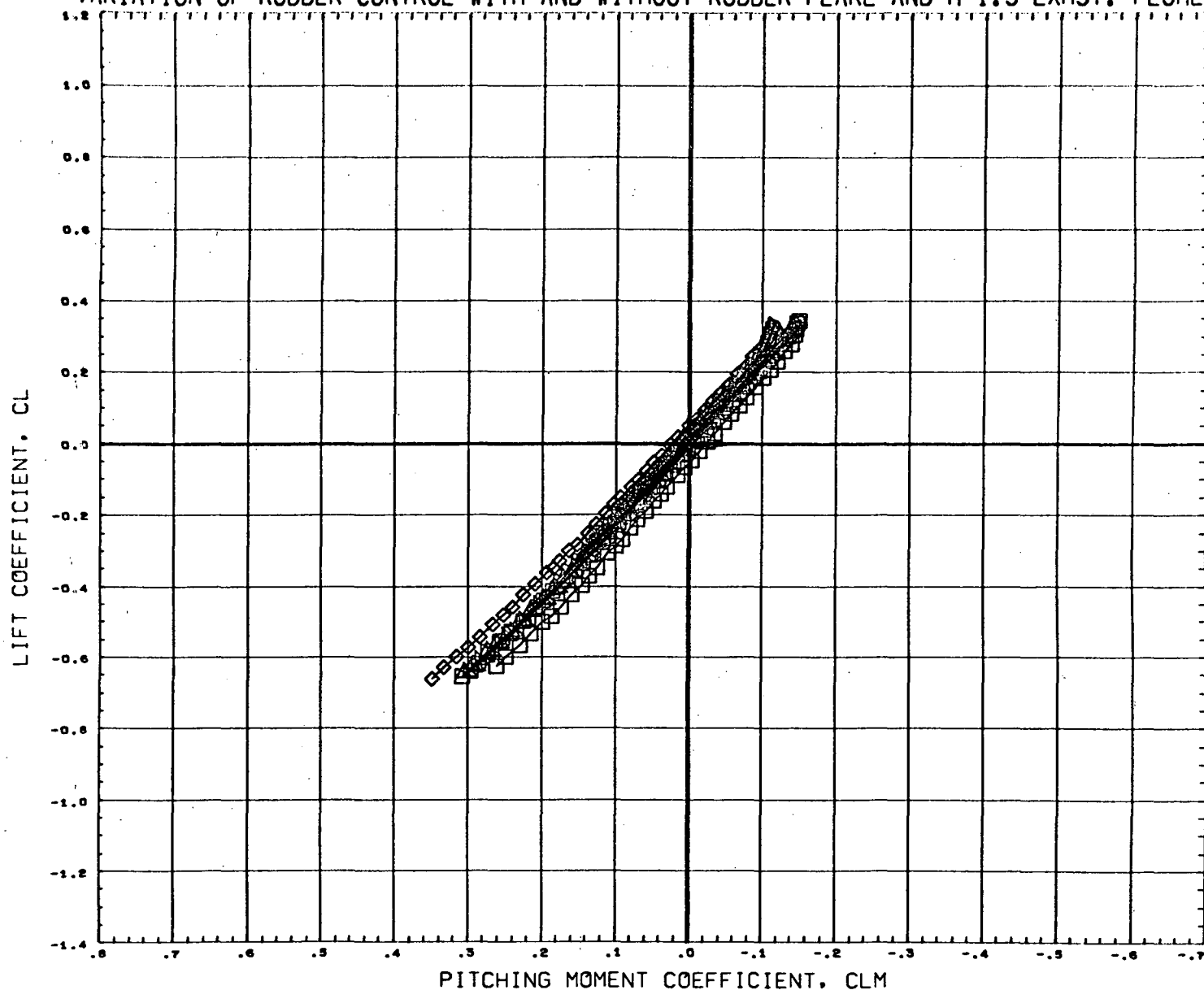
# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XHRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YHRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZHRP	200.0004 IN.
						SCALE	0.0060



# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



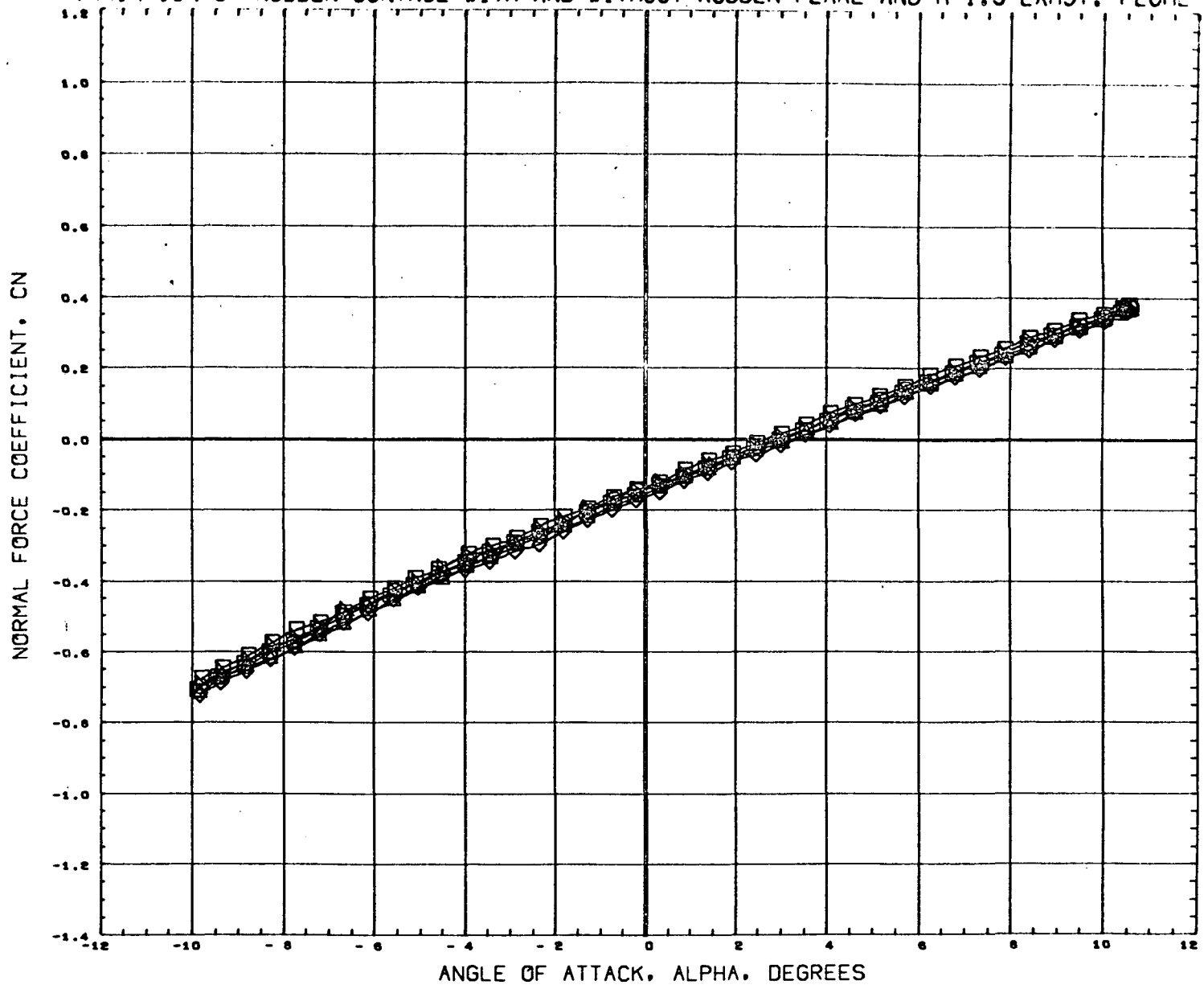
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE(T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

1.51

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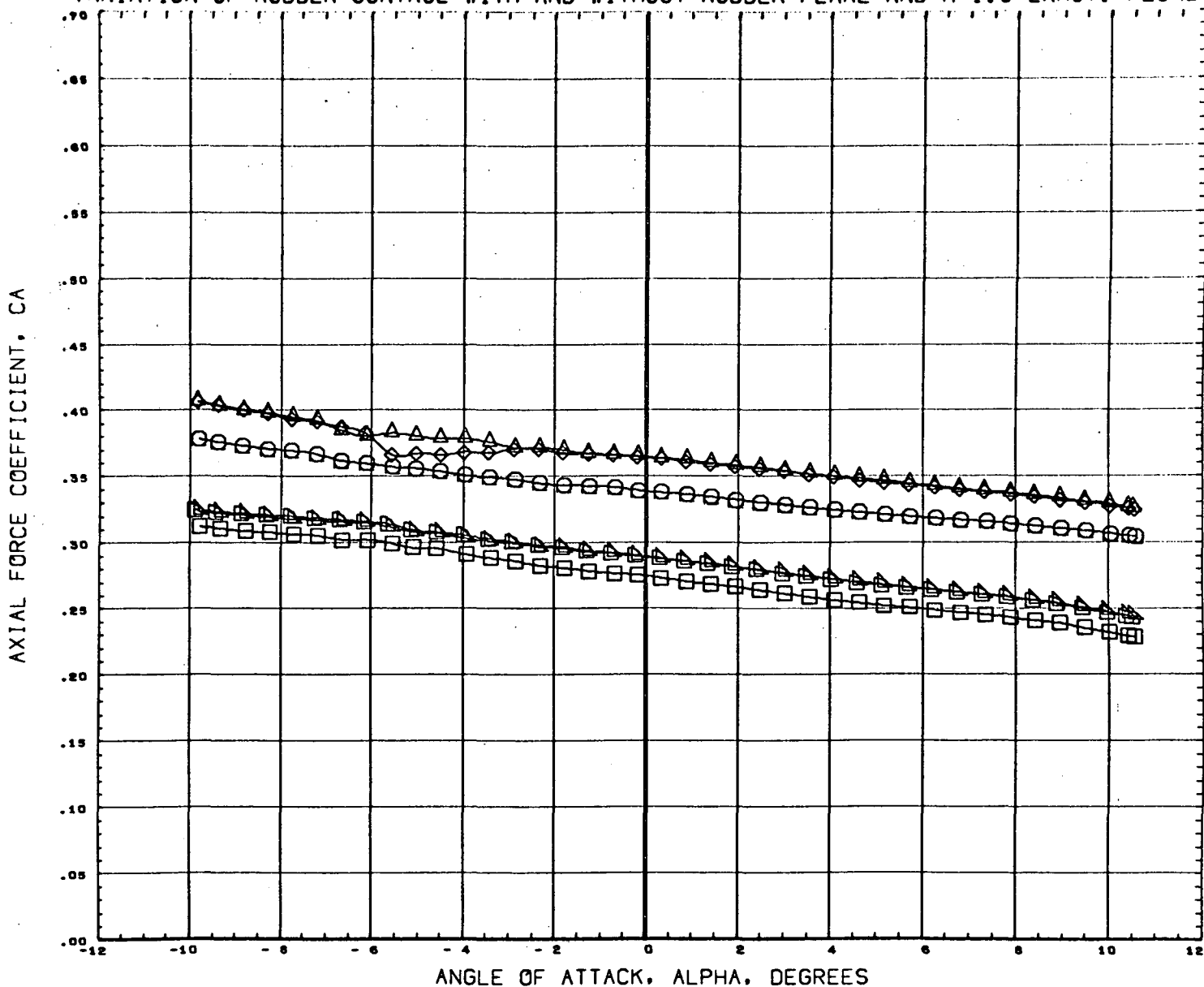
# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.3004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	957.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

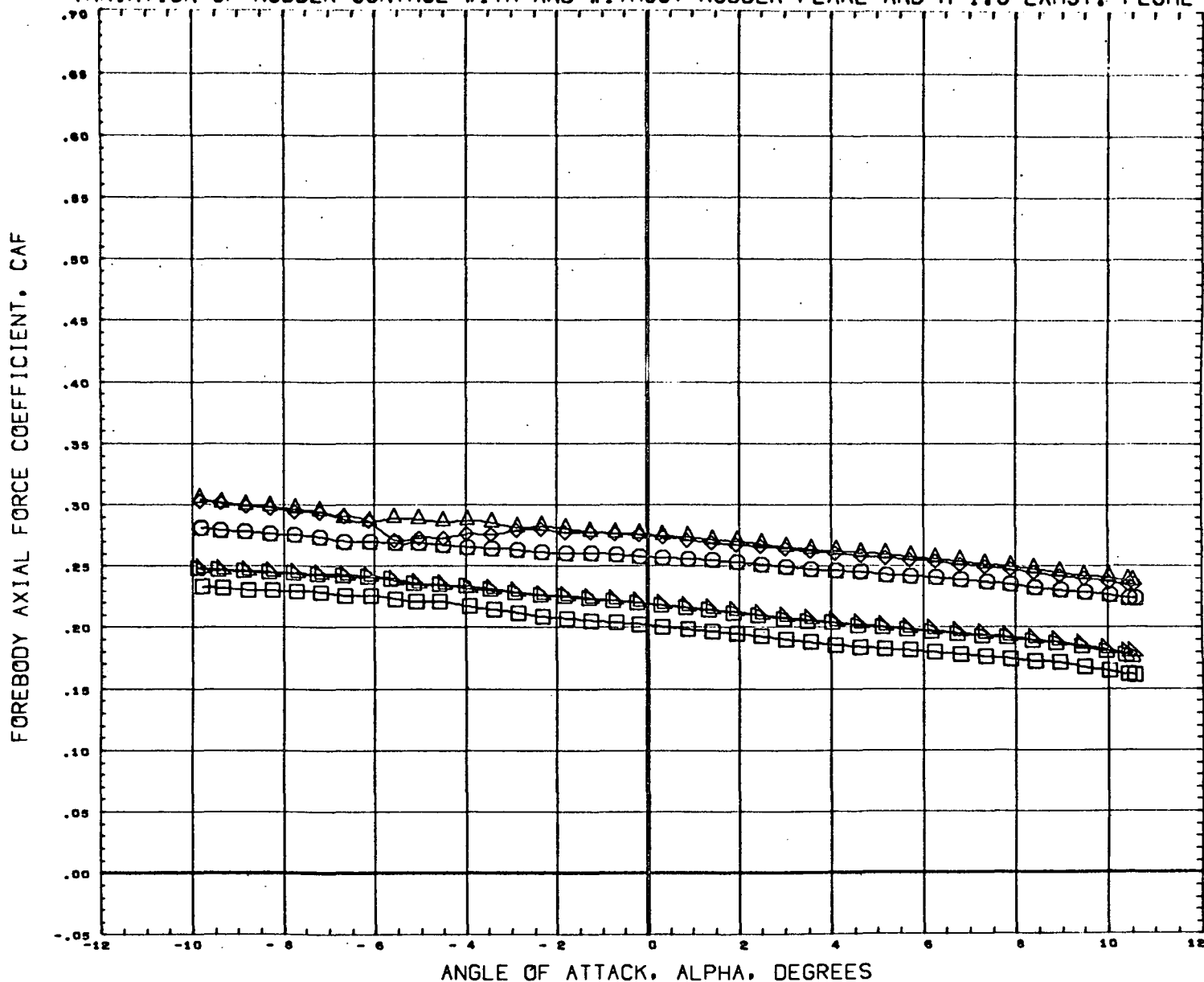


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF 609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF 882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP 557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP 0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP 200.0004 IN.
						SCALE 0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

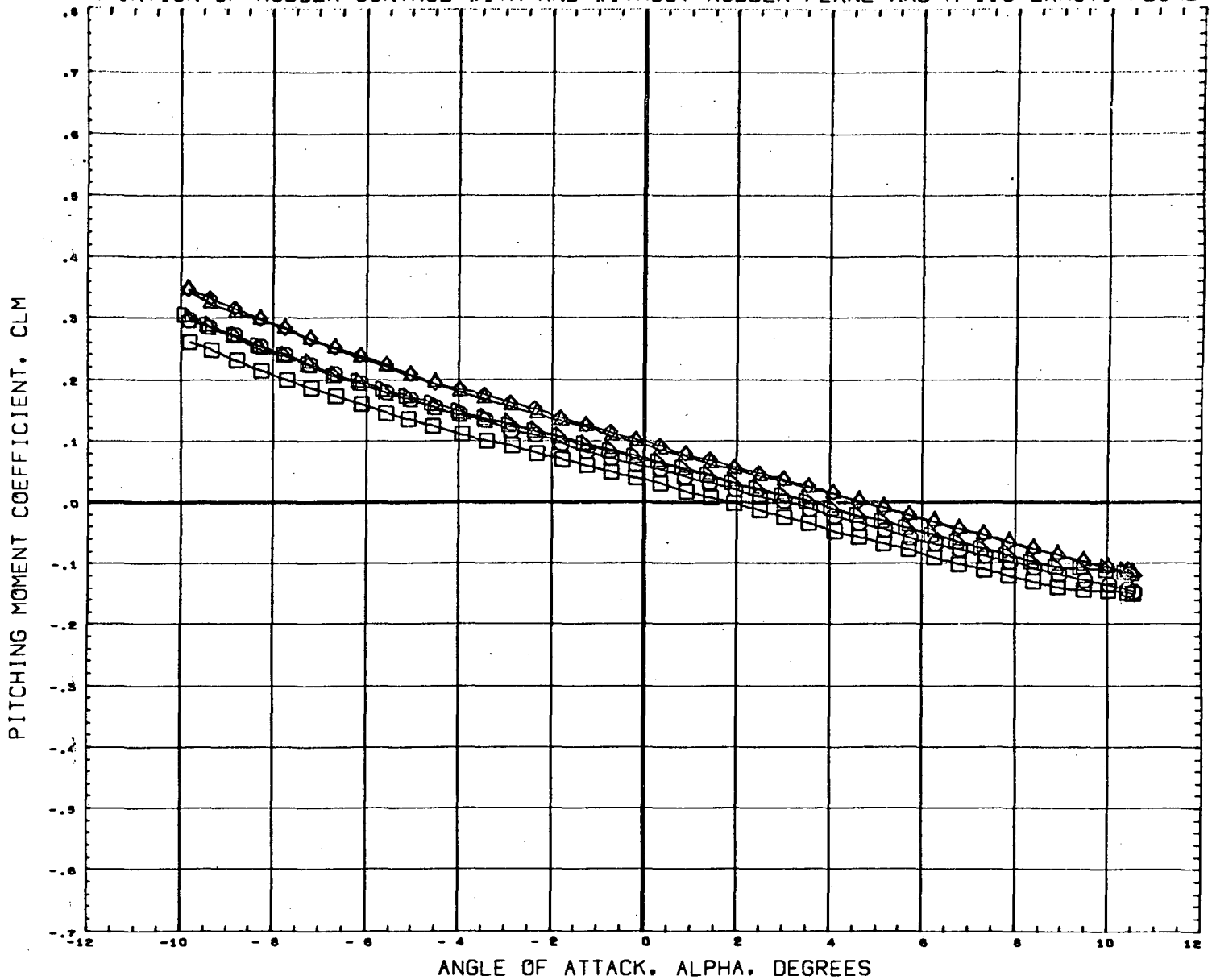


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

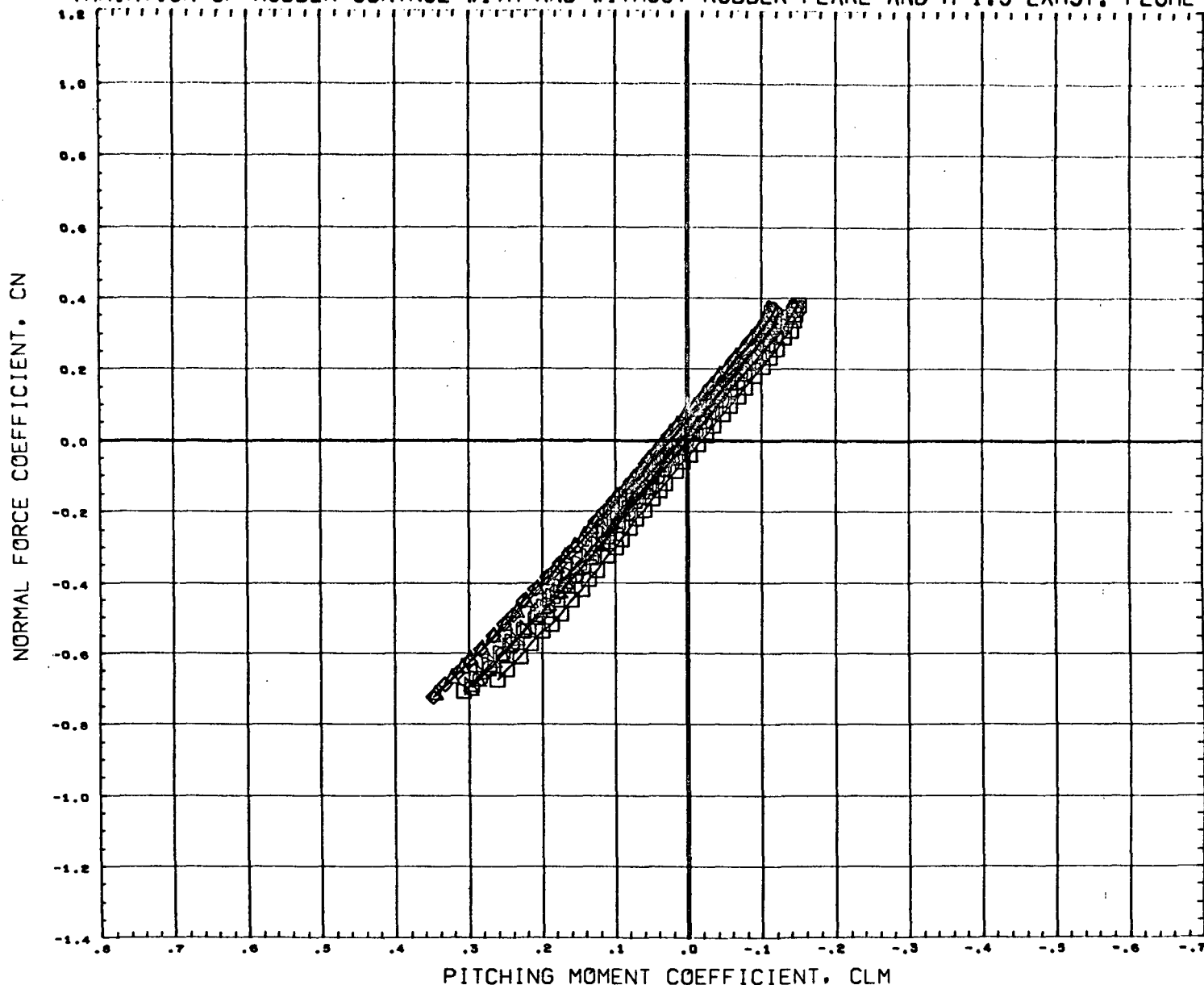


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A3)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



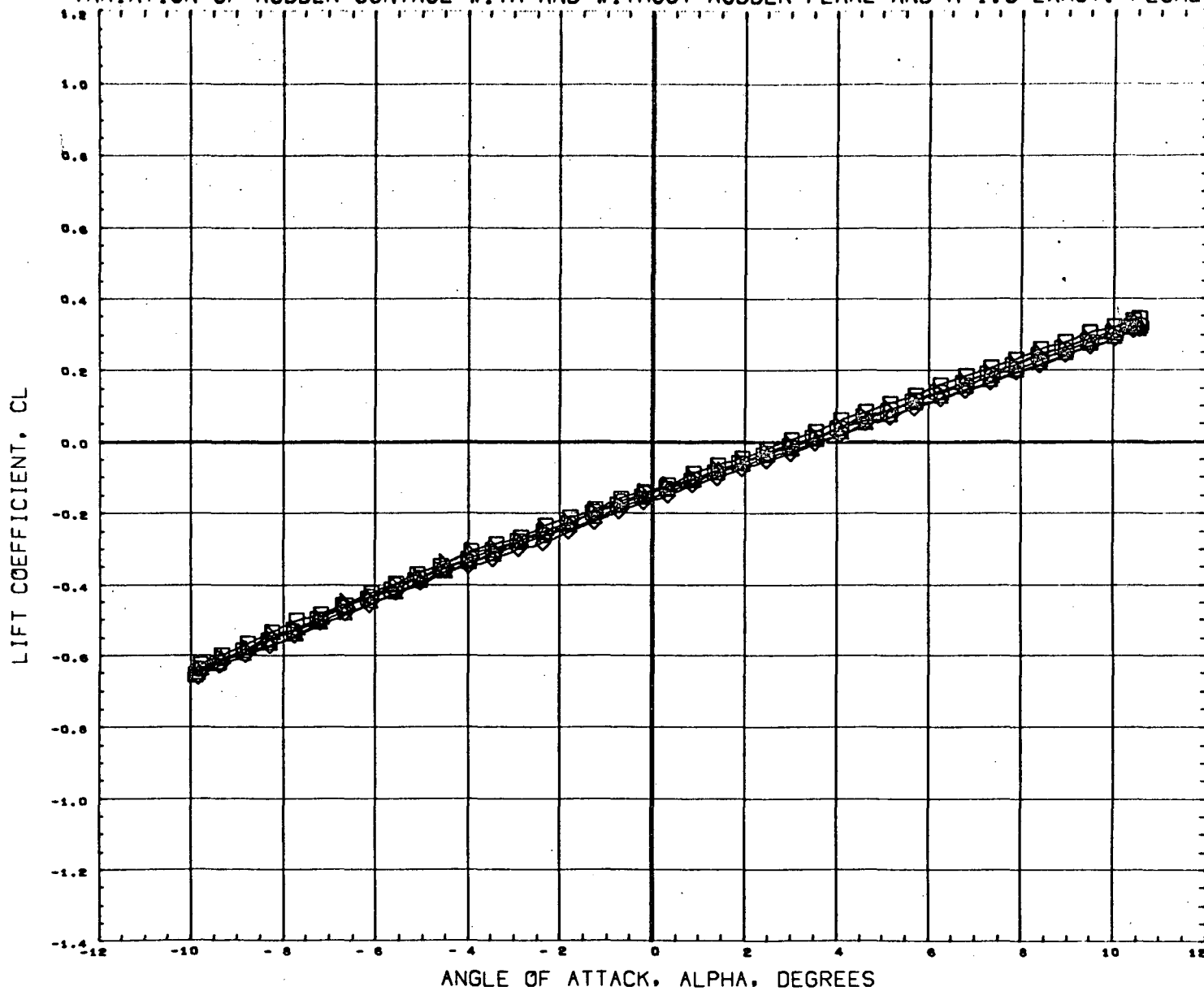
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

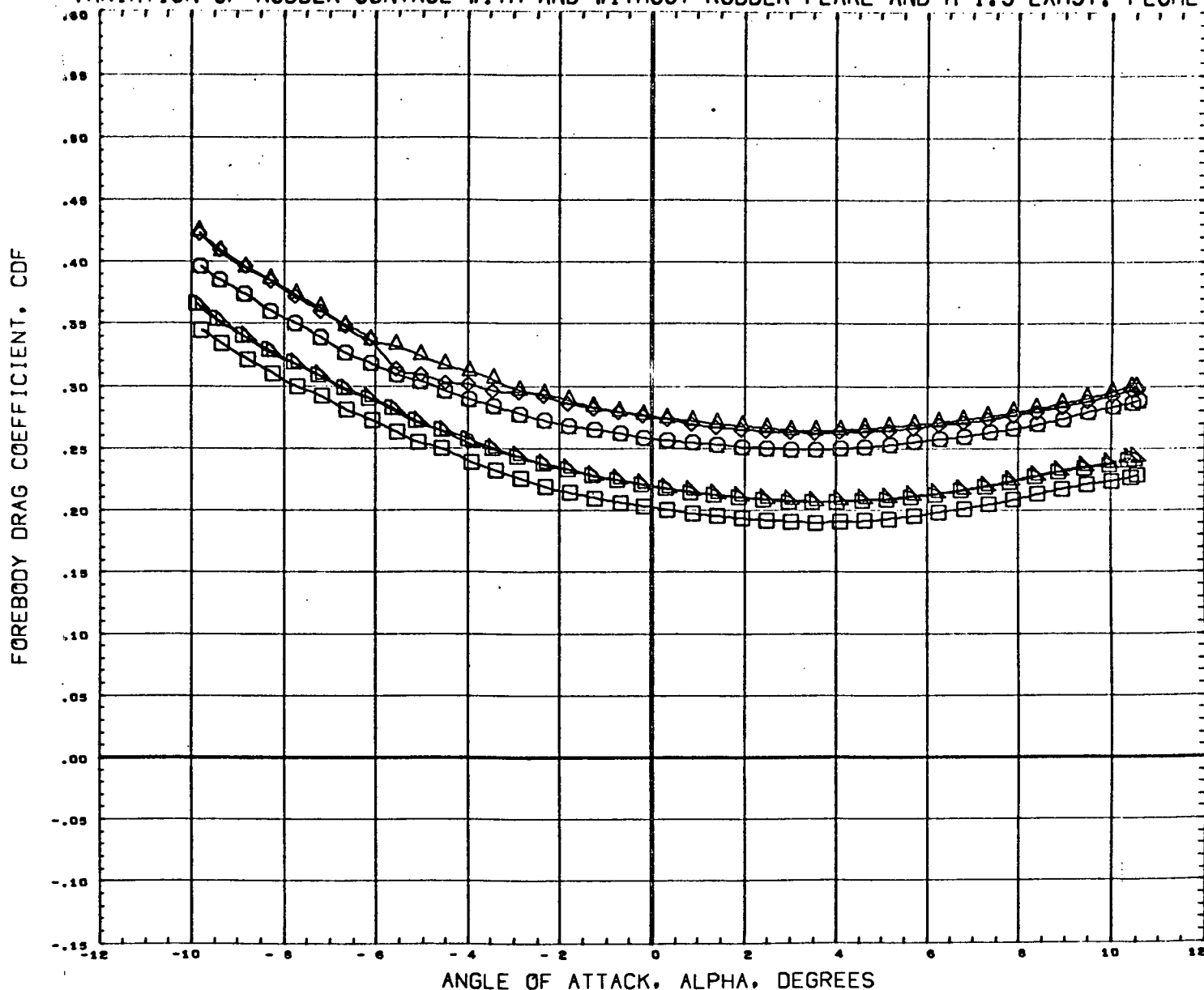


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



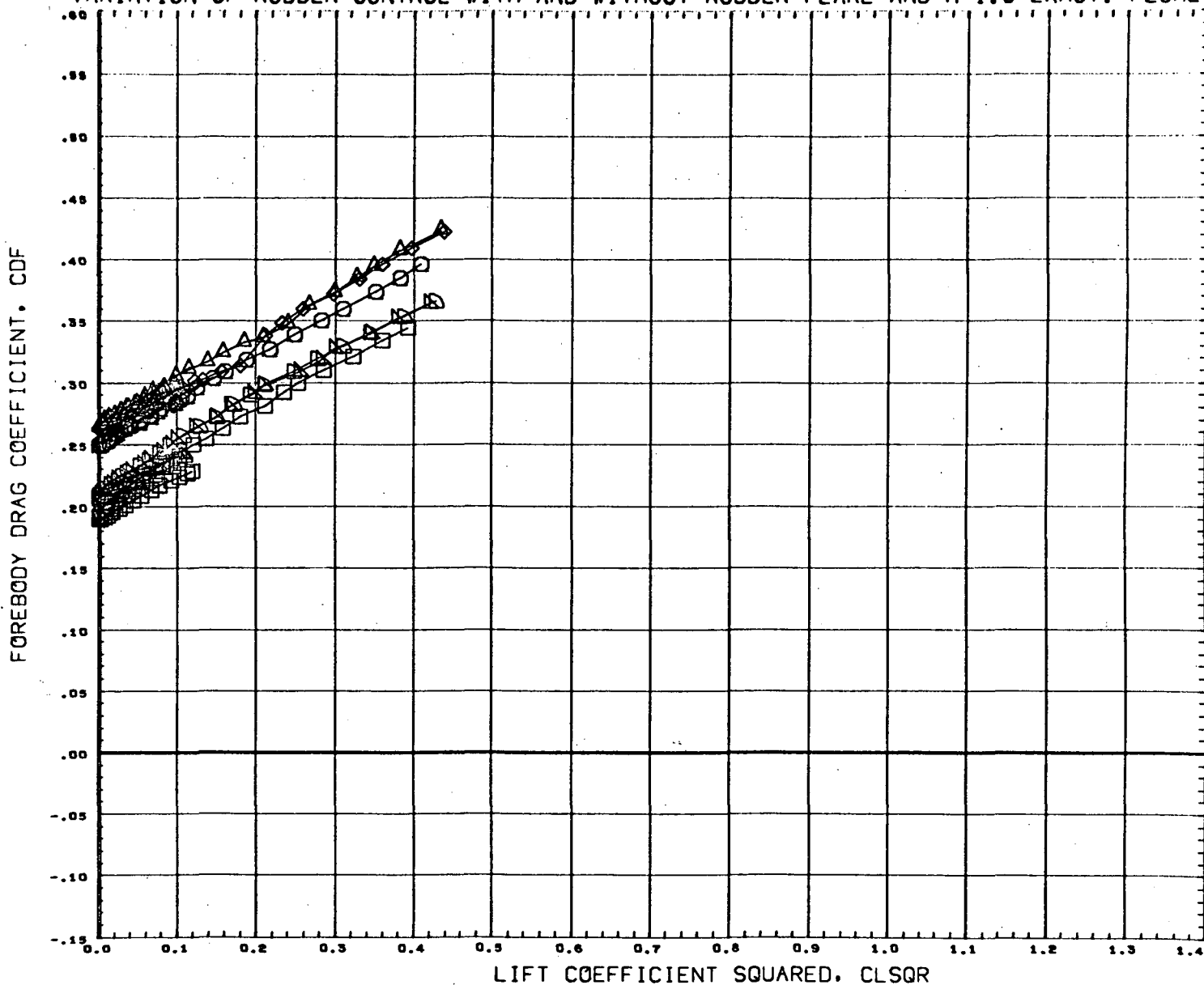
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

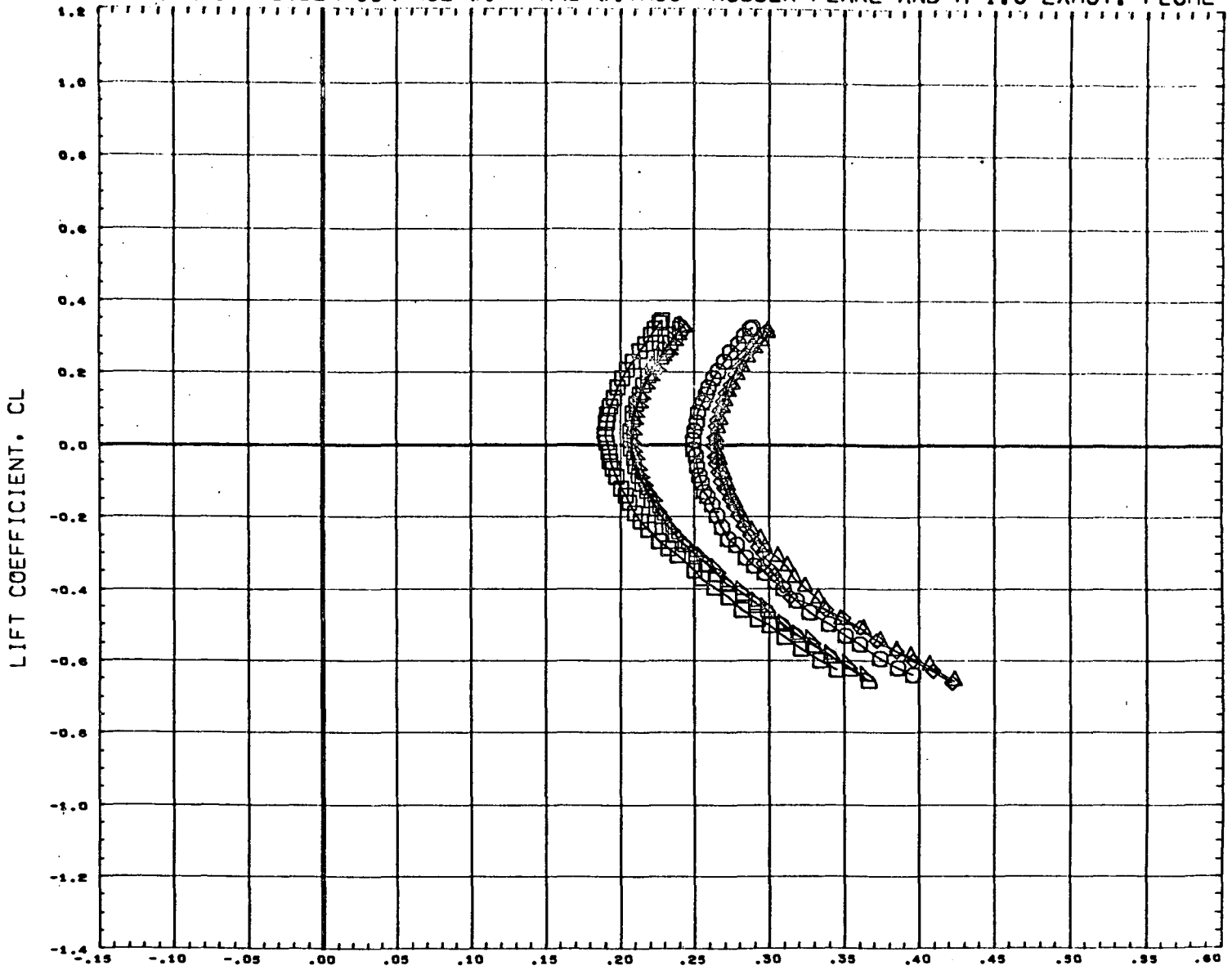


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004	IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000	IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME



FOREBODY DRAG COEFFICIENT, CDF

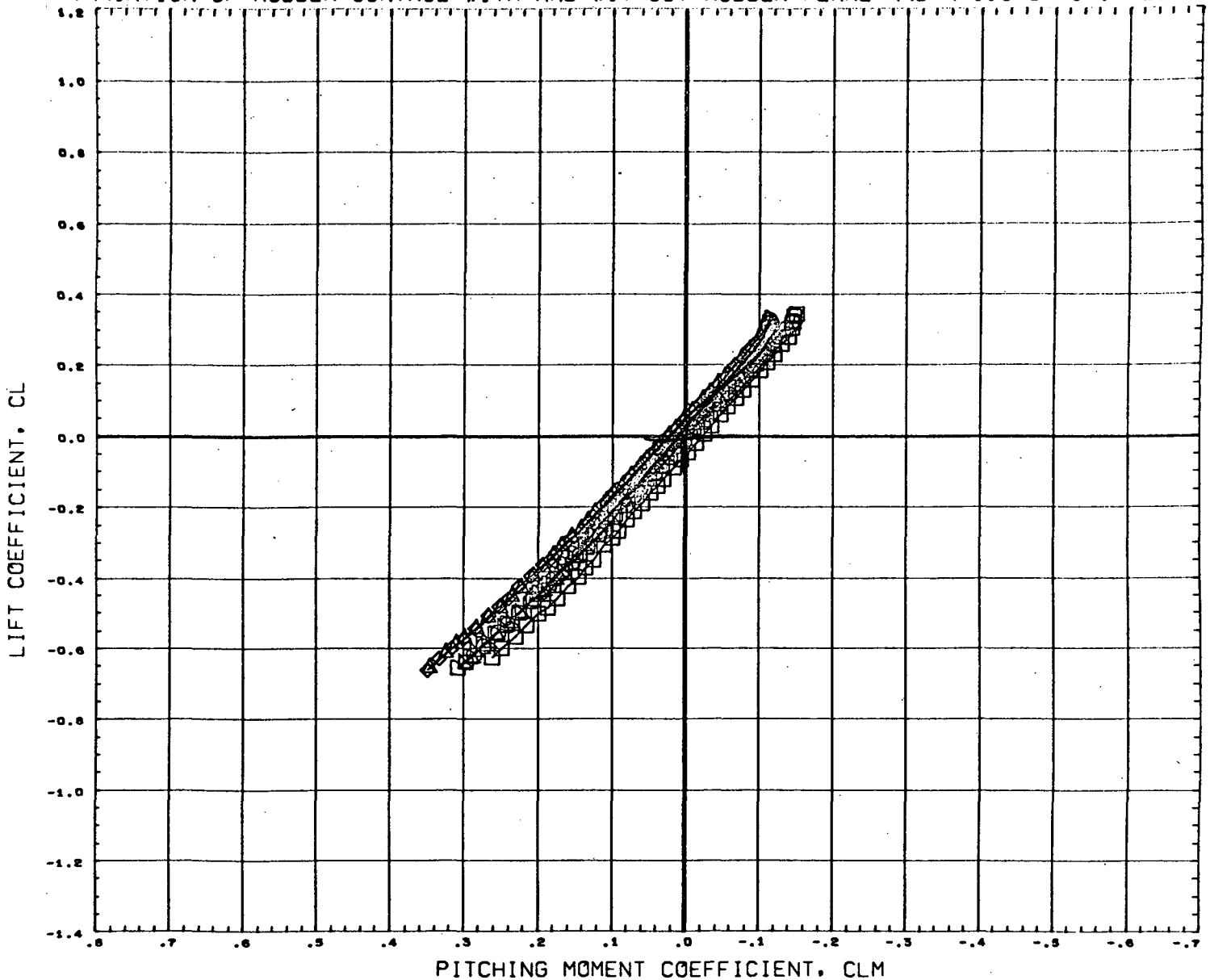
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	957.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE (T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=1.5 EXHST. PLUME

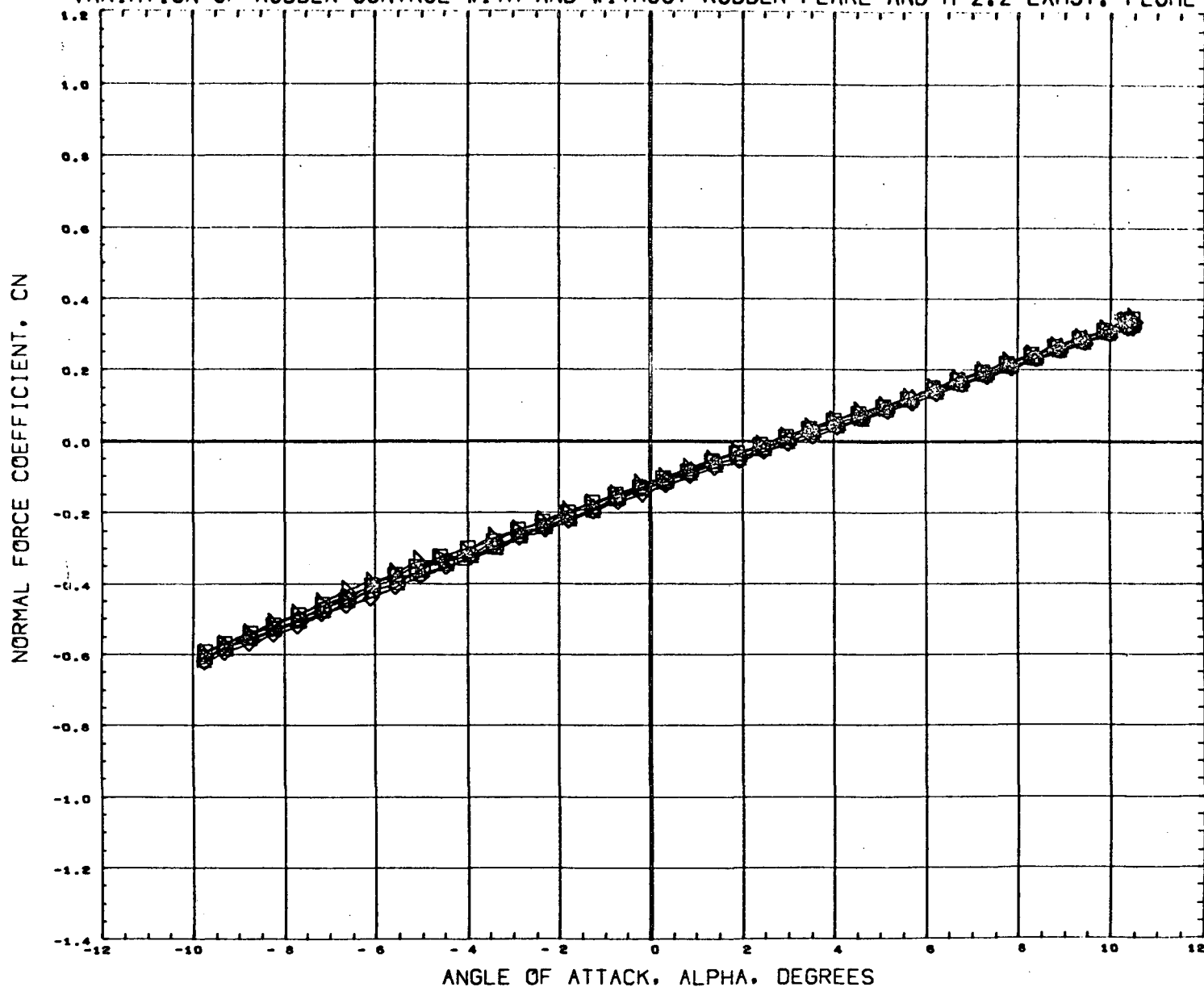


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4	0.000	0.000	20.000	10.000	BREF	862.0004 IN.
(CD75A1)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75A5)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD75A7)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4+PLU(1.5)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

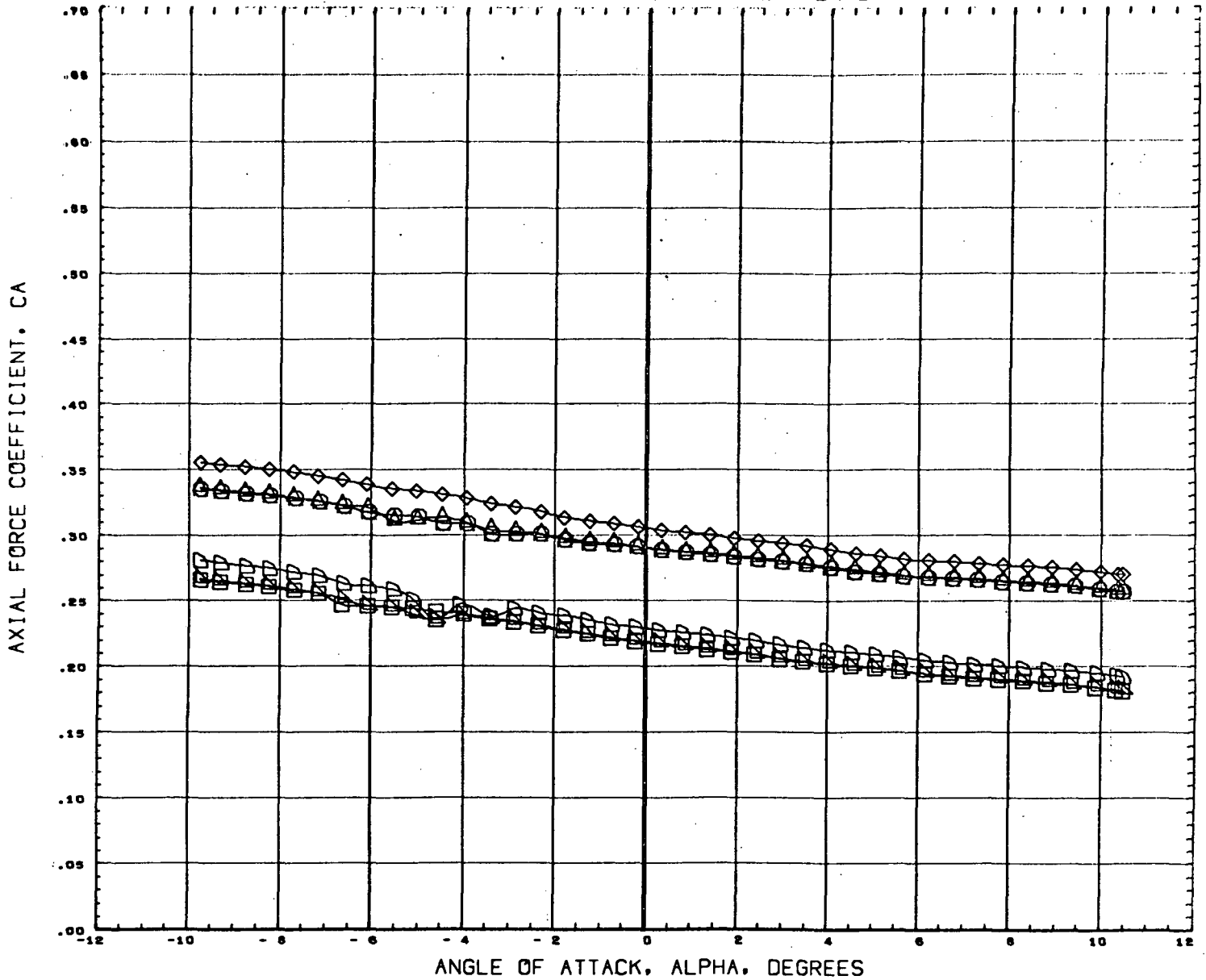


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD7583)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD7583)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	0.000	10.000	YMRP	0.000C IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2,2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

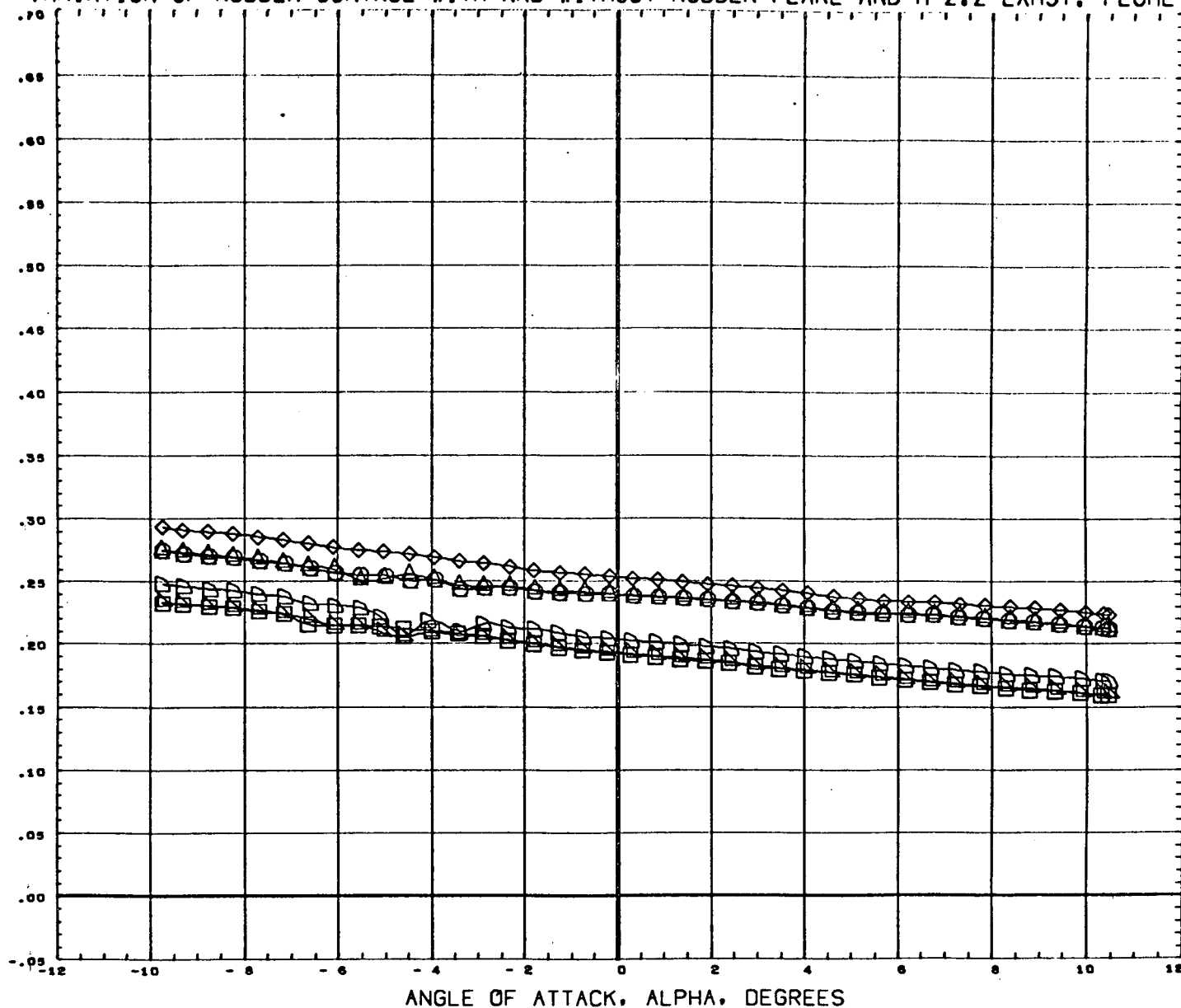
MACH

2.20

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

FOREBODY AXIAL FORCE COEFFICIENT, CAF



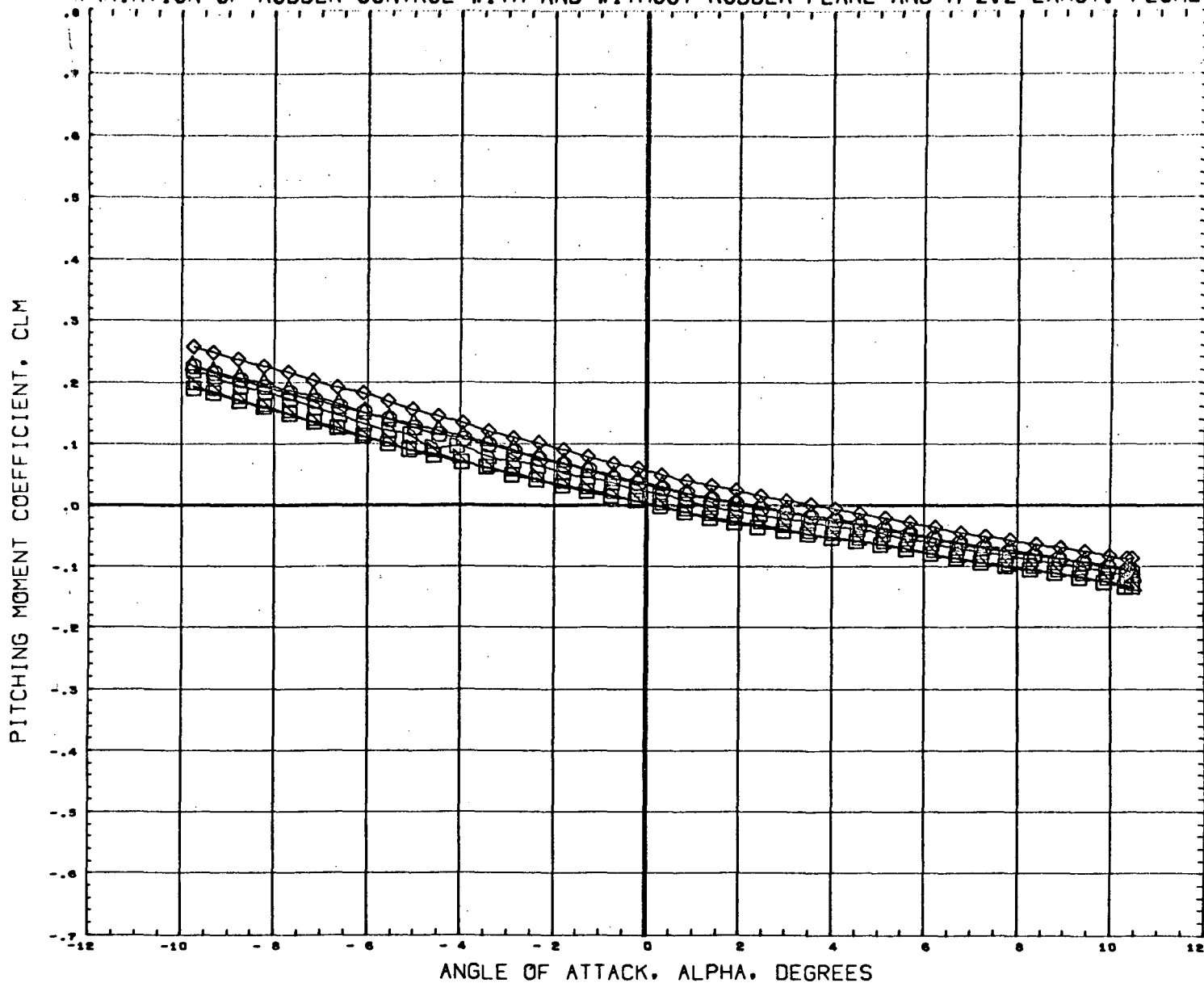
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRF	557.0004	IN.
(CD7583)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRF	0.0000	IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRF	200.0004	IN.
						SCALE	0.0060	

MACH

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

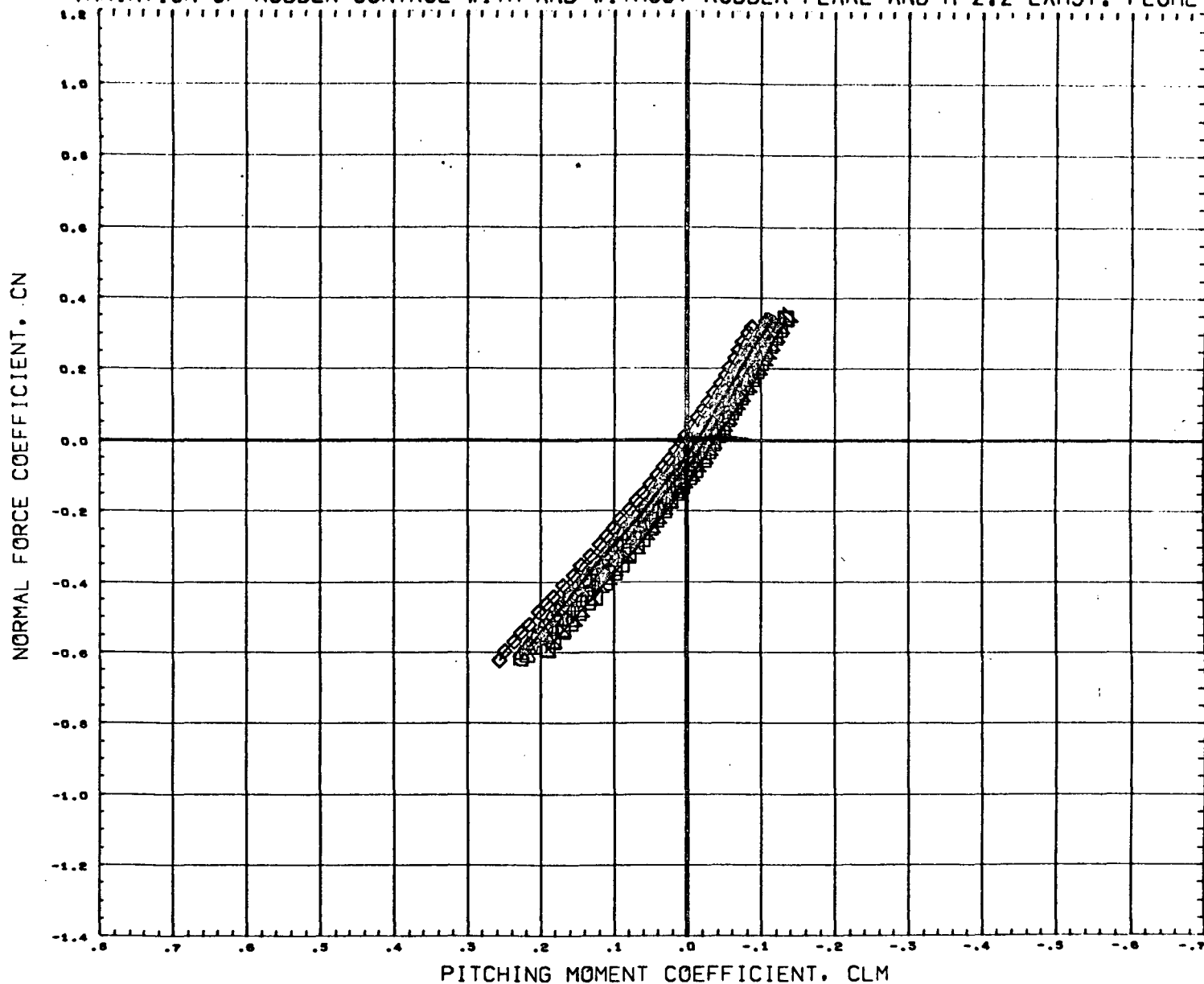


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUOFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	809.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD75B1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75B3)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRP	0.0000 IN.
(CD75B7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME



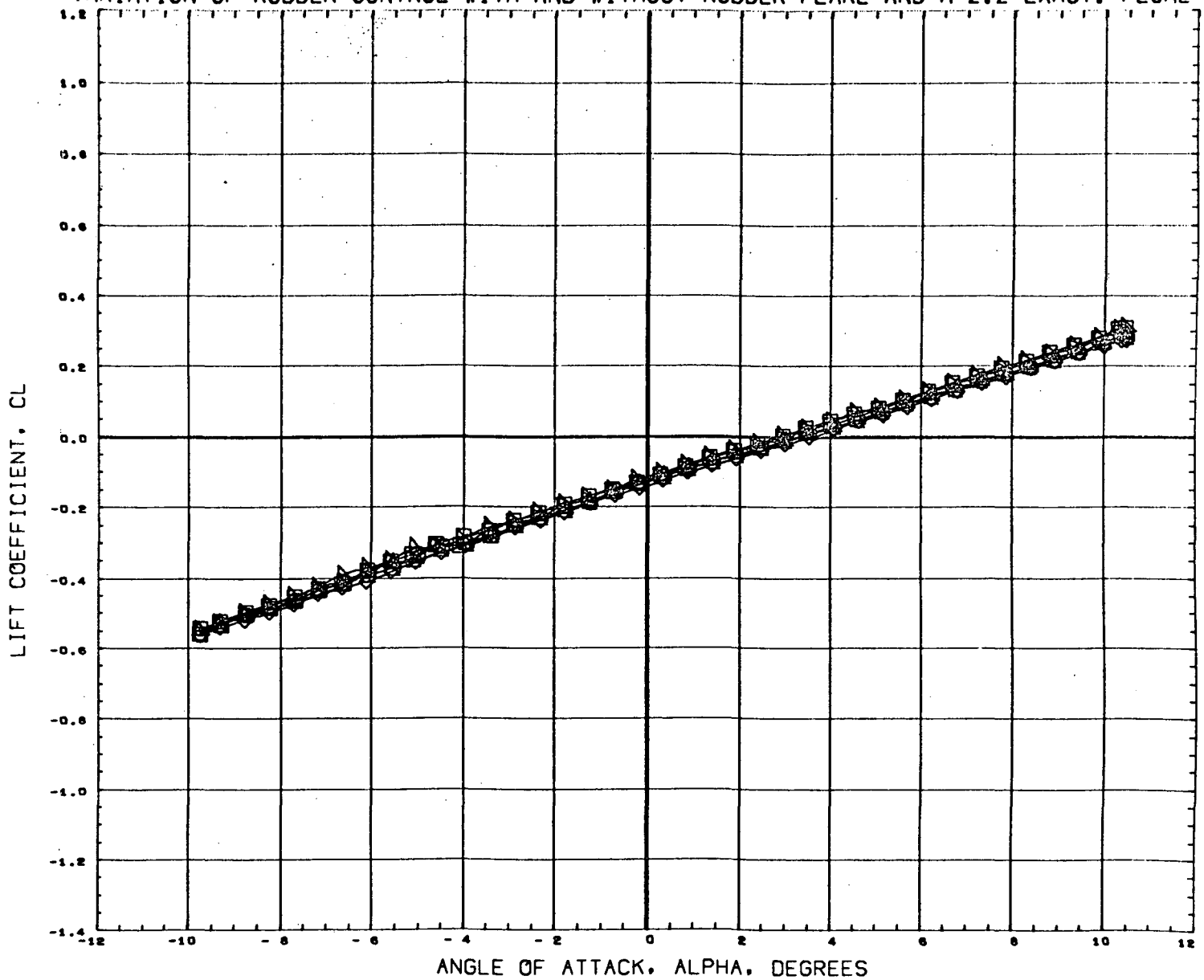
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE(T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	662.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRF	557.0004 IN.
(CD7583)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRF	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

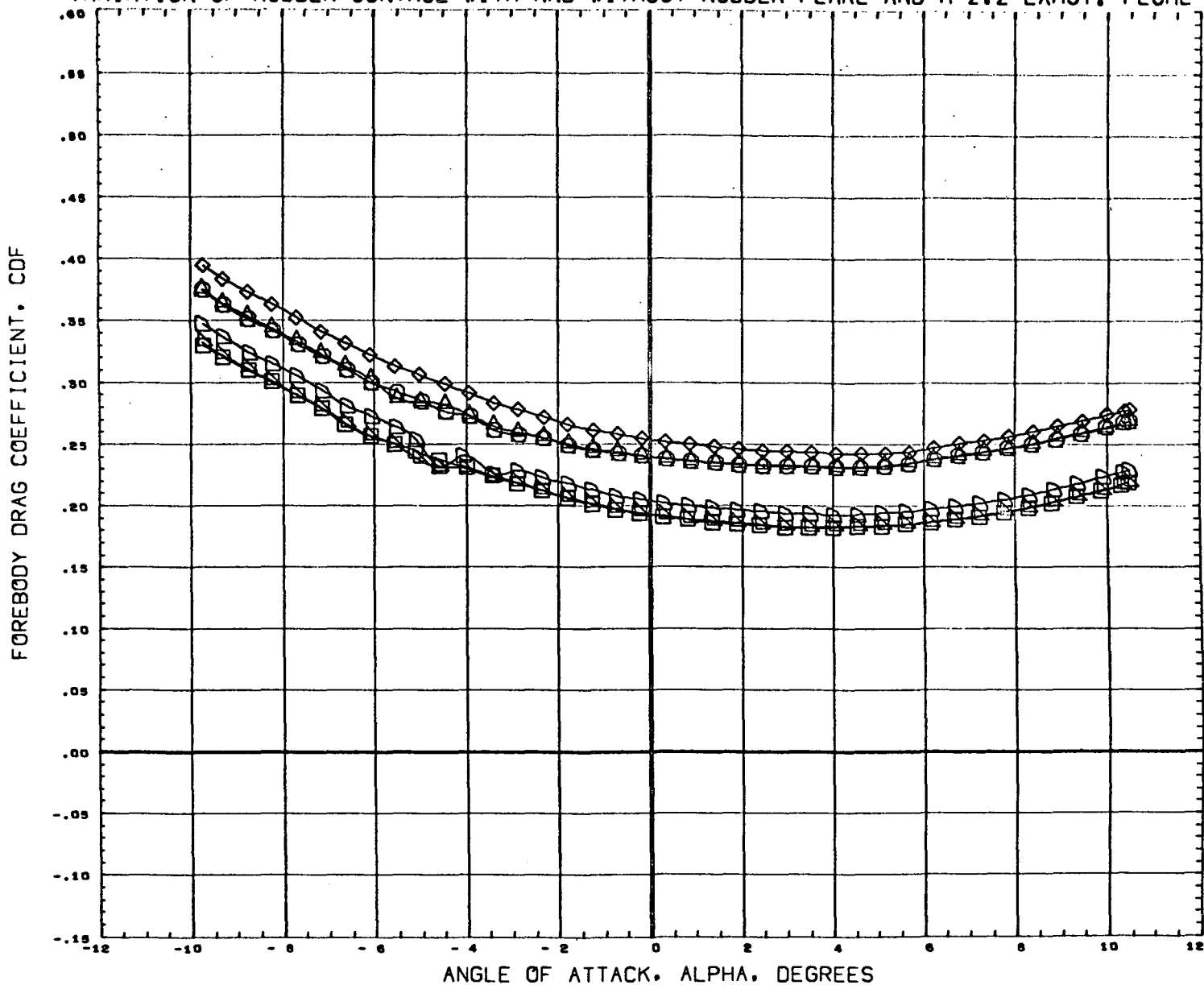


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	SREF	882.0004 IN.
(CD75B1)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD75B3)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRP	0.0000 IN.
(CD75B7)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME



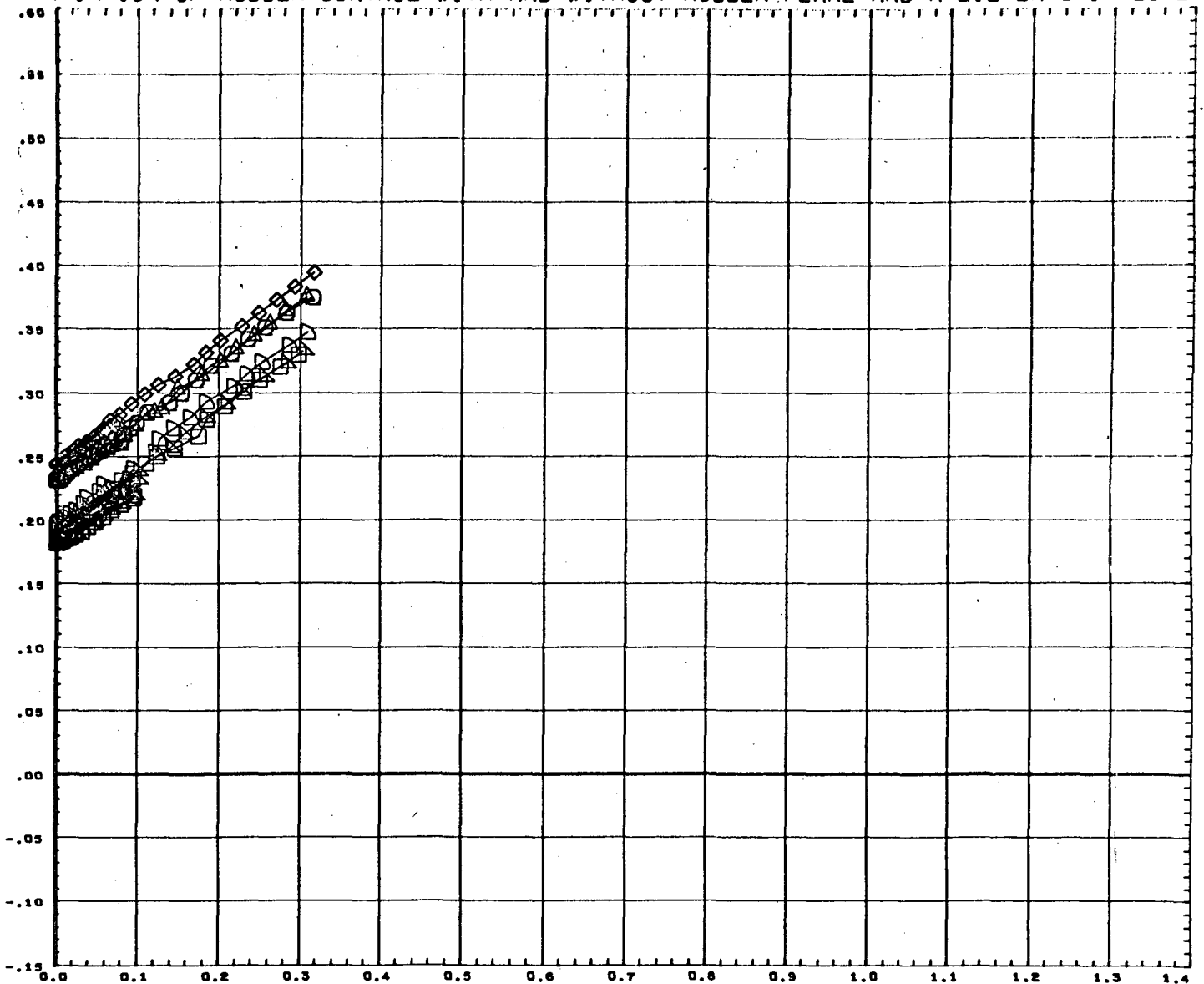
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004	IN.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004	IN.
(CD7583)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRP	0.0000	IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004	IN.
						SCALE	0.0060	

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQR

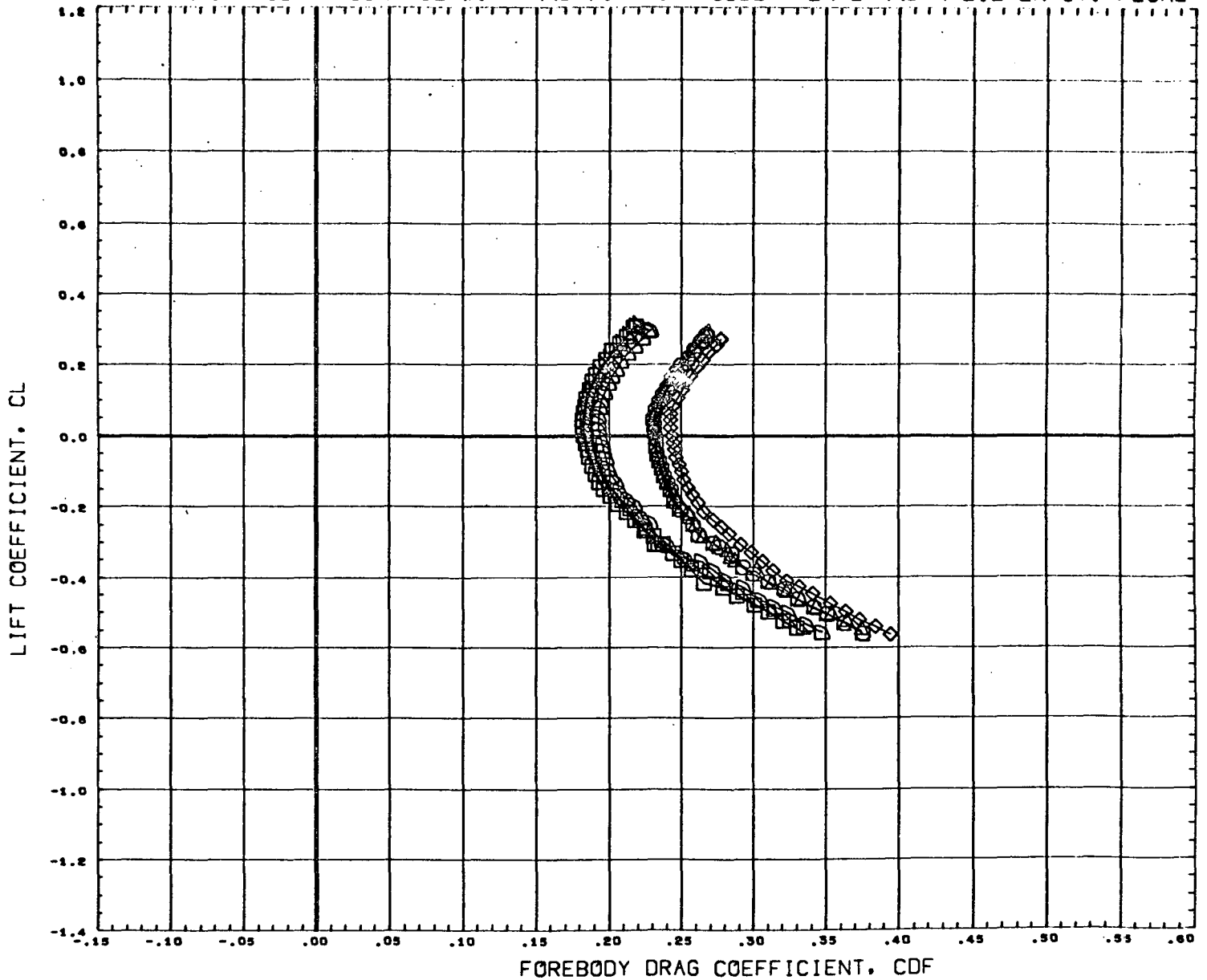
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.9004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD7583)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

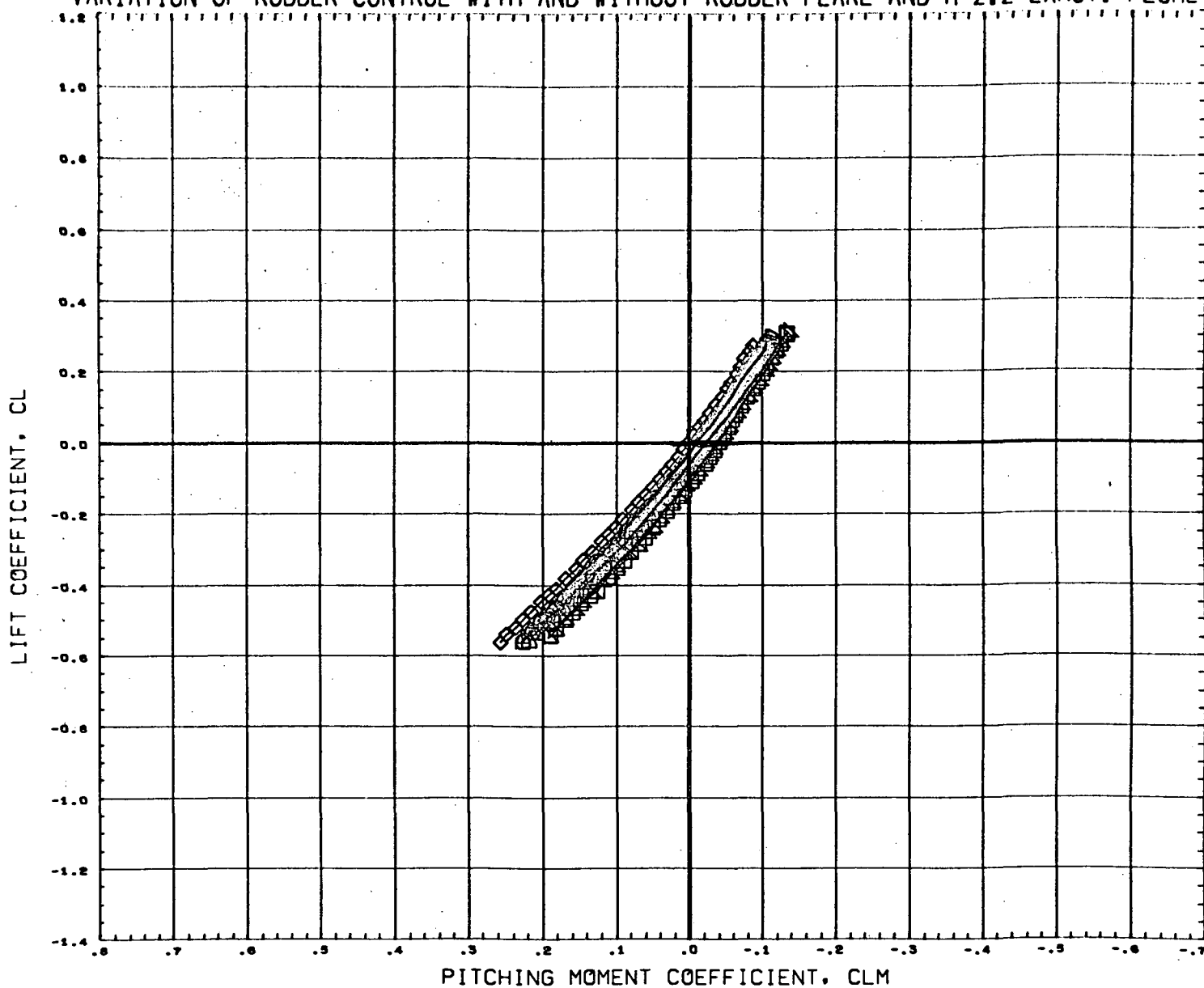


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD7583)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

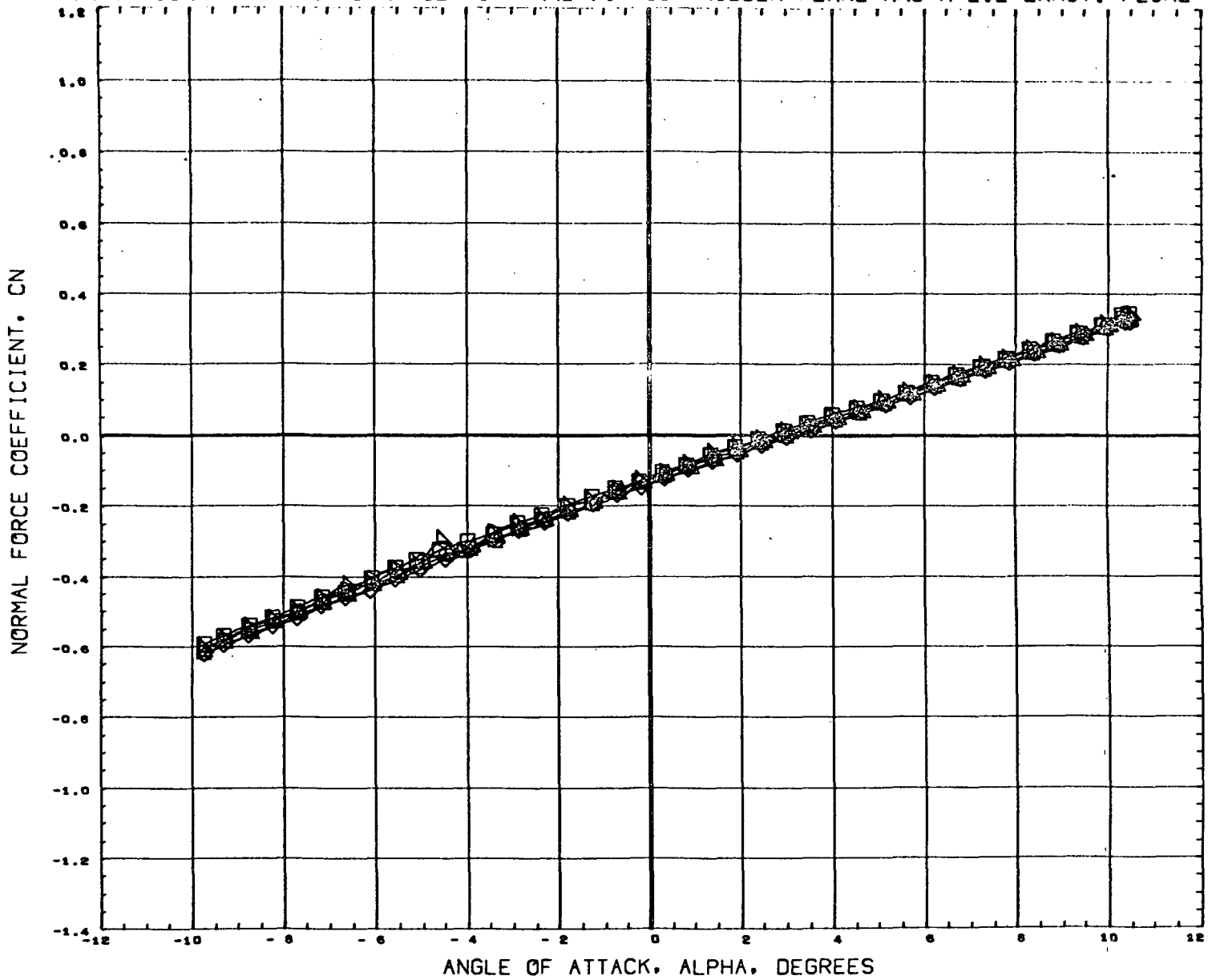


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7594)	MDAC S-222 COMPOSITE (T-CG) O1T4F1B7A1-4	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRRP	557.0004 IN.
(CD7583)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	10.000	YMRRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

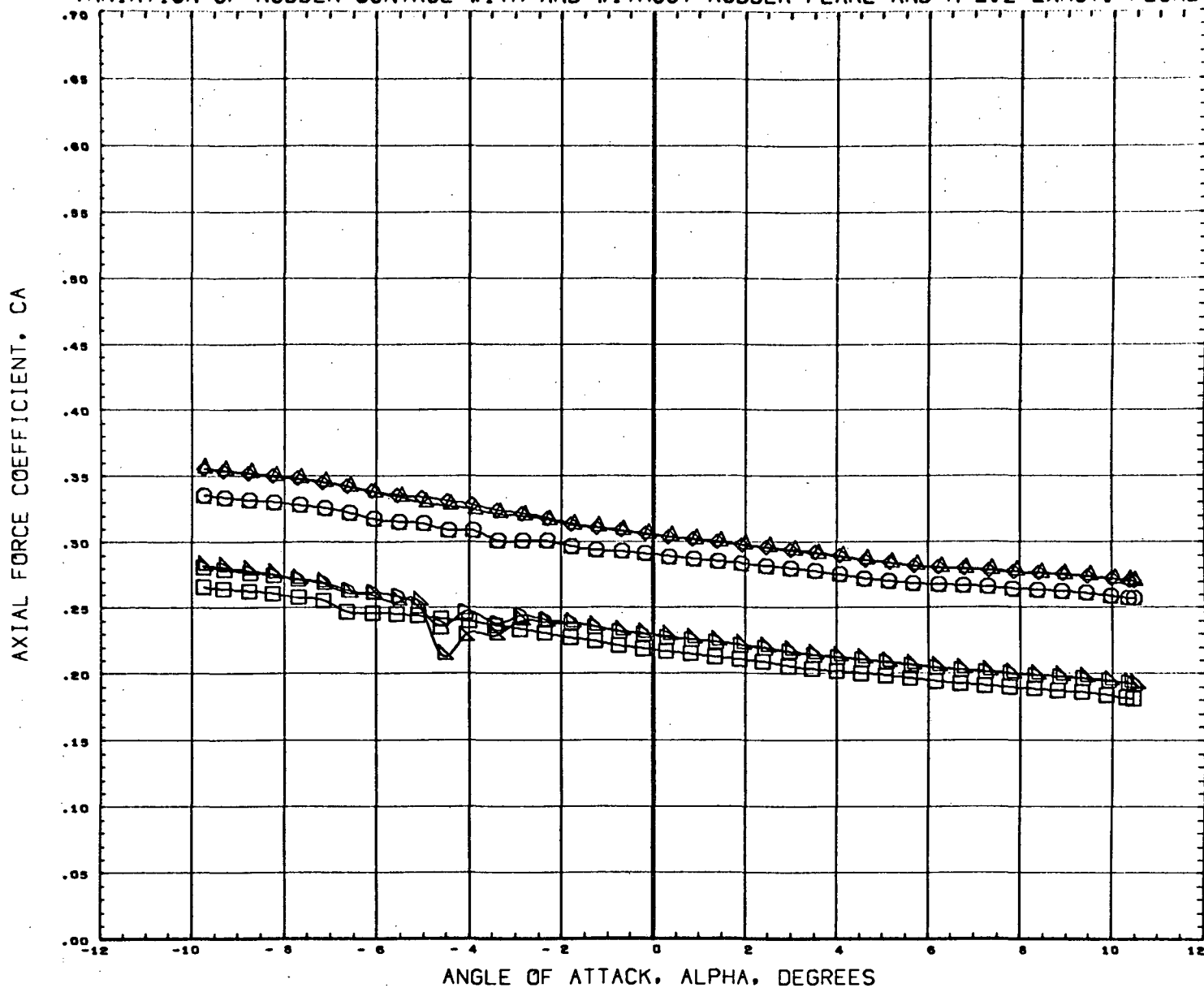


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD7585)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME



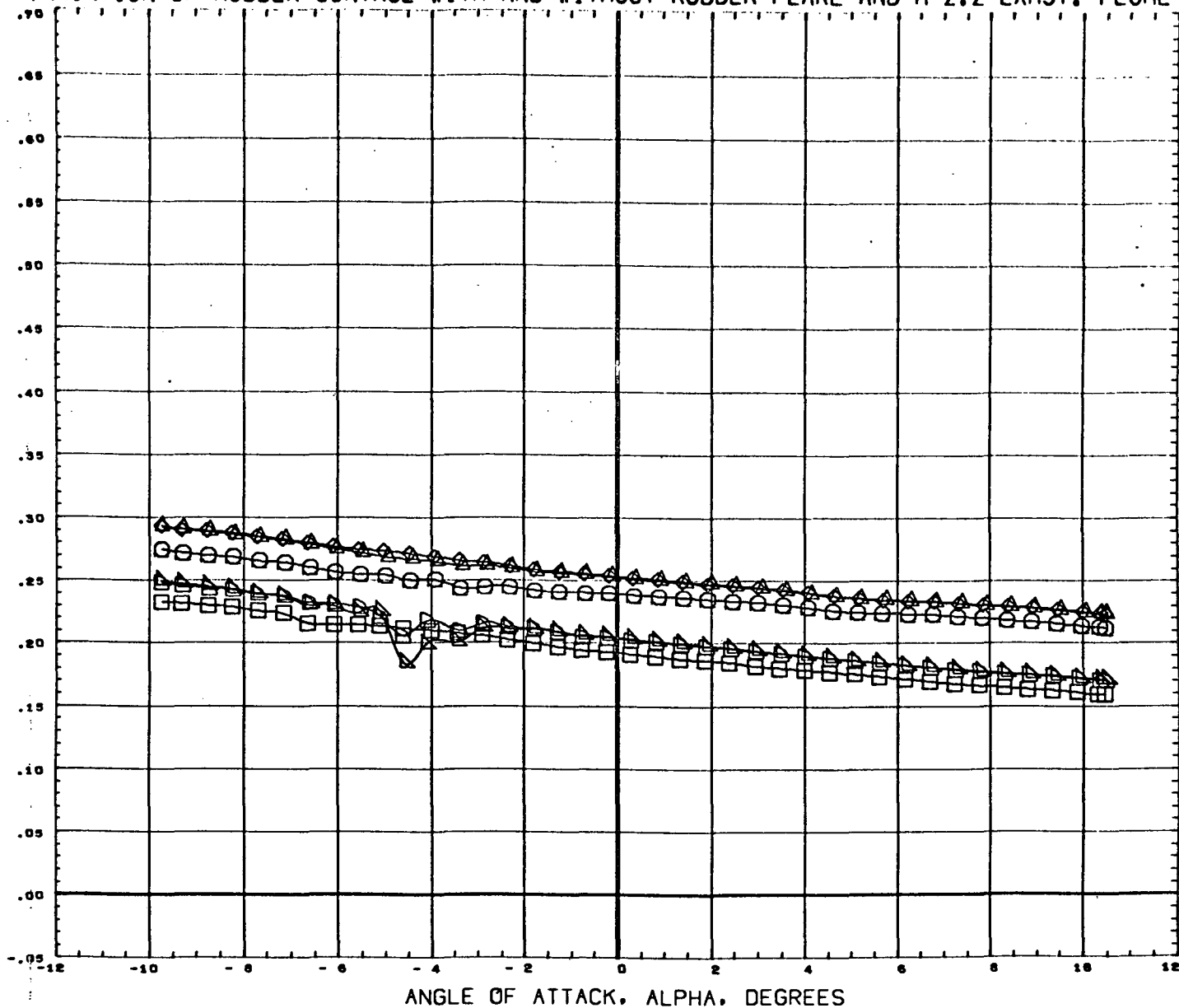
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	SREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	537.0004 IN.
(CD7585)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0080

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

FOREBODY AXIAL FORCE COEFFICIENT, CAF



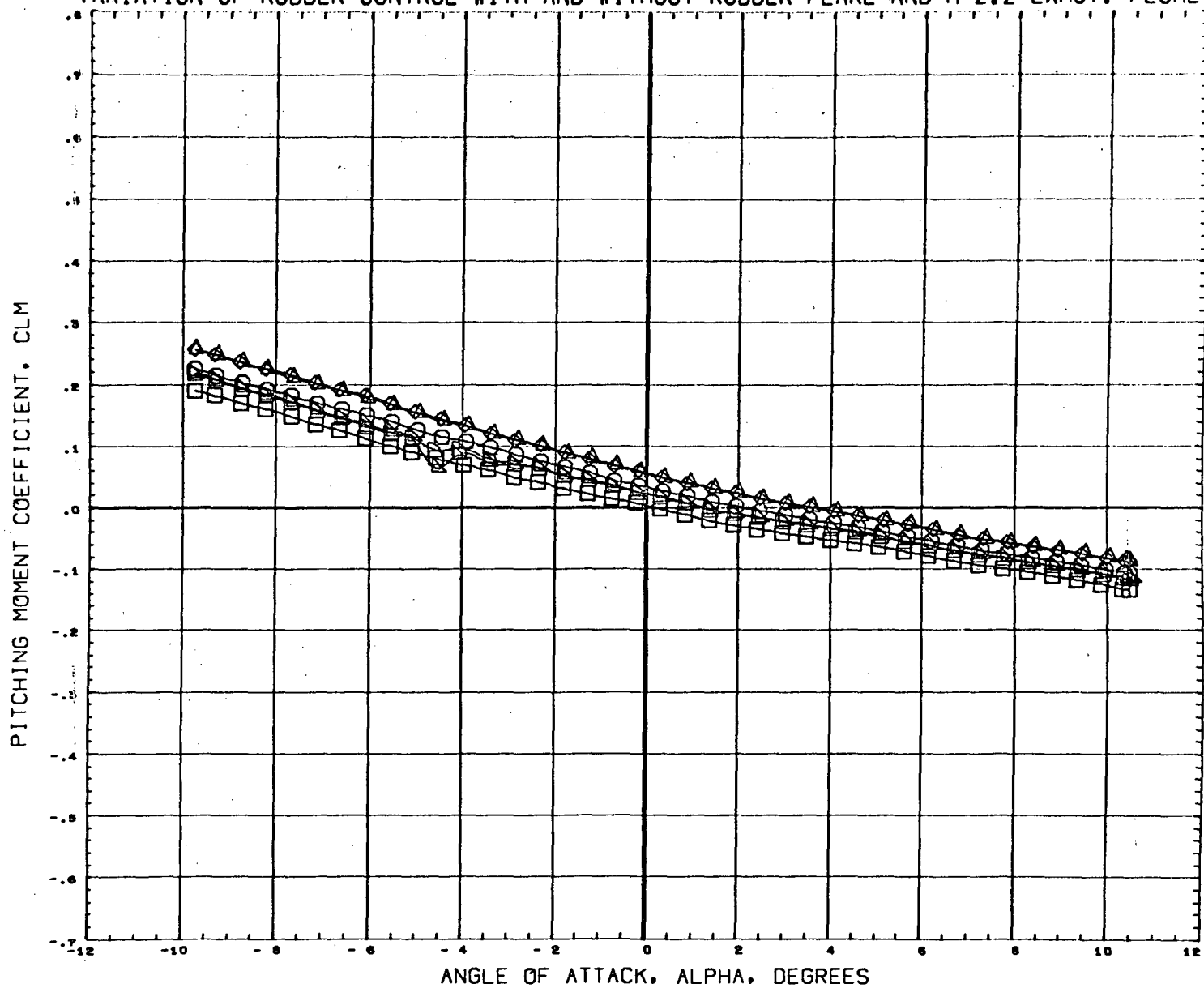
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD7585)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

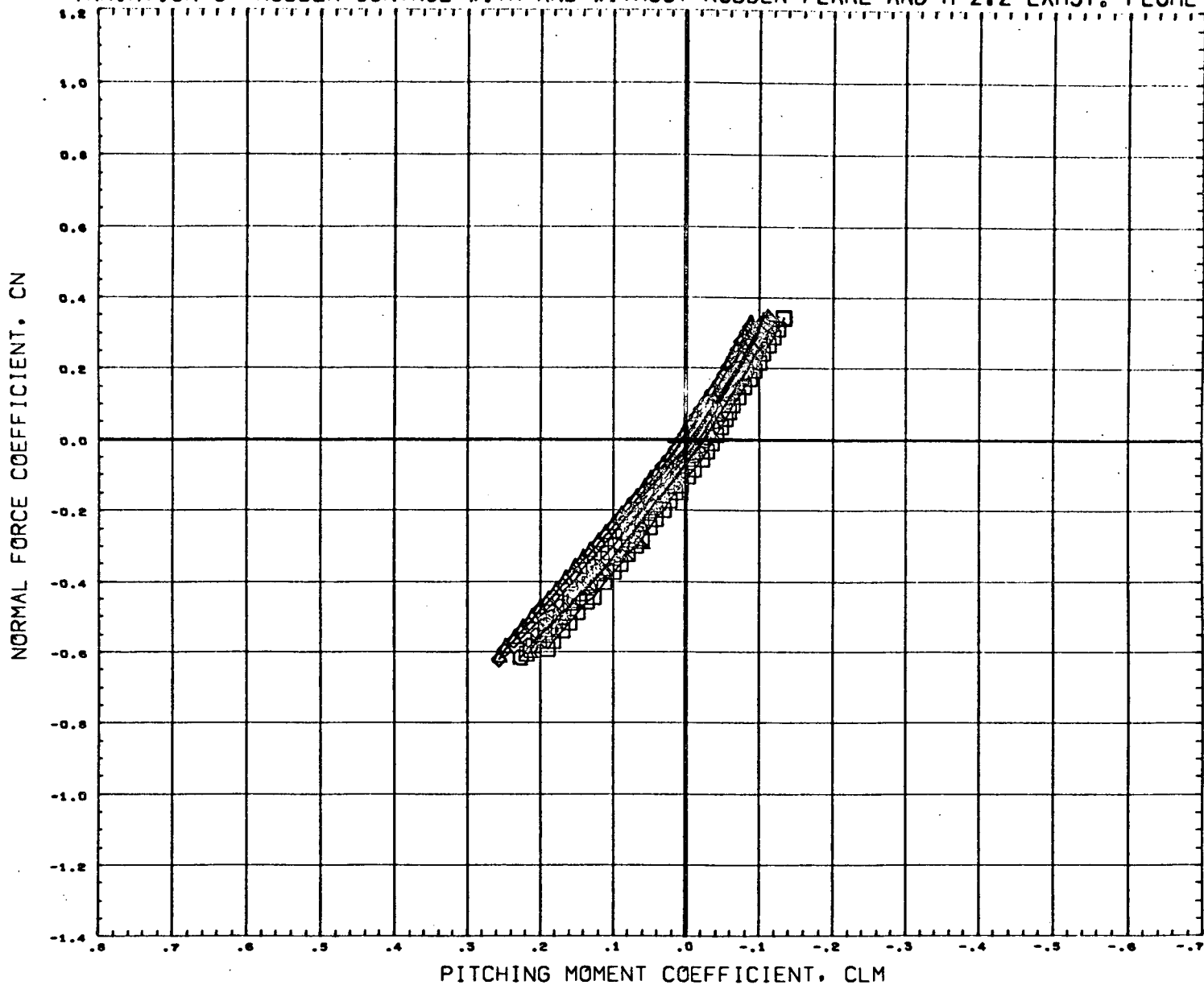


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(C07592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(C07598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(C07581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMPP	557.0004 IN.
(C07585)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMPP	0.0000 IN.
(C07587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMPP	200.0004 IN.
						SCALE	0.0060

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME



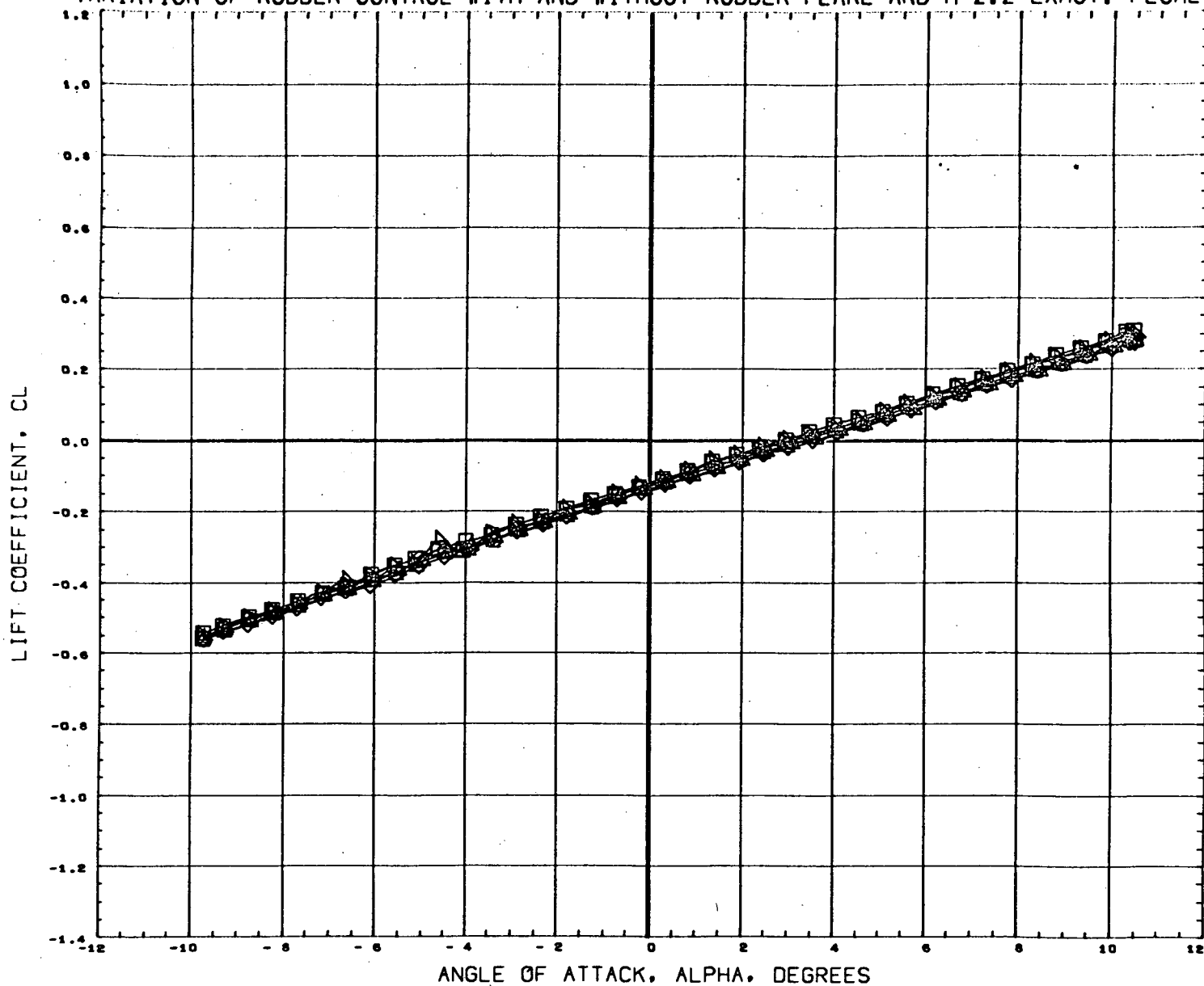
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	662.0004	IN.
(CD7581)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRF	557.0004	IN.
(CD7585)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRF	0.0000	IN.
(CD7587)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRF	200.0004	IN.
						SCALE	0.0060	

MACH

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME



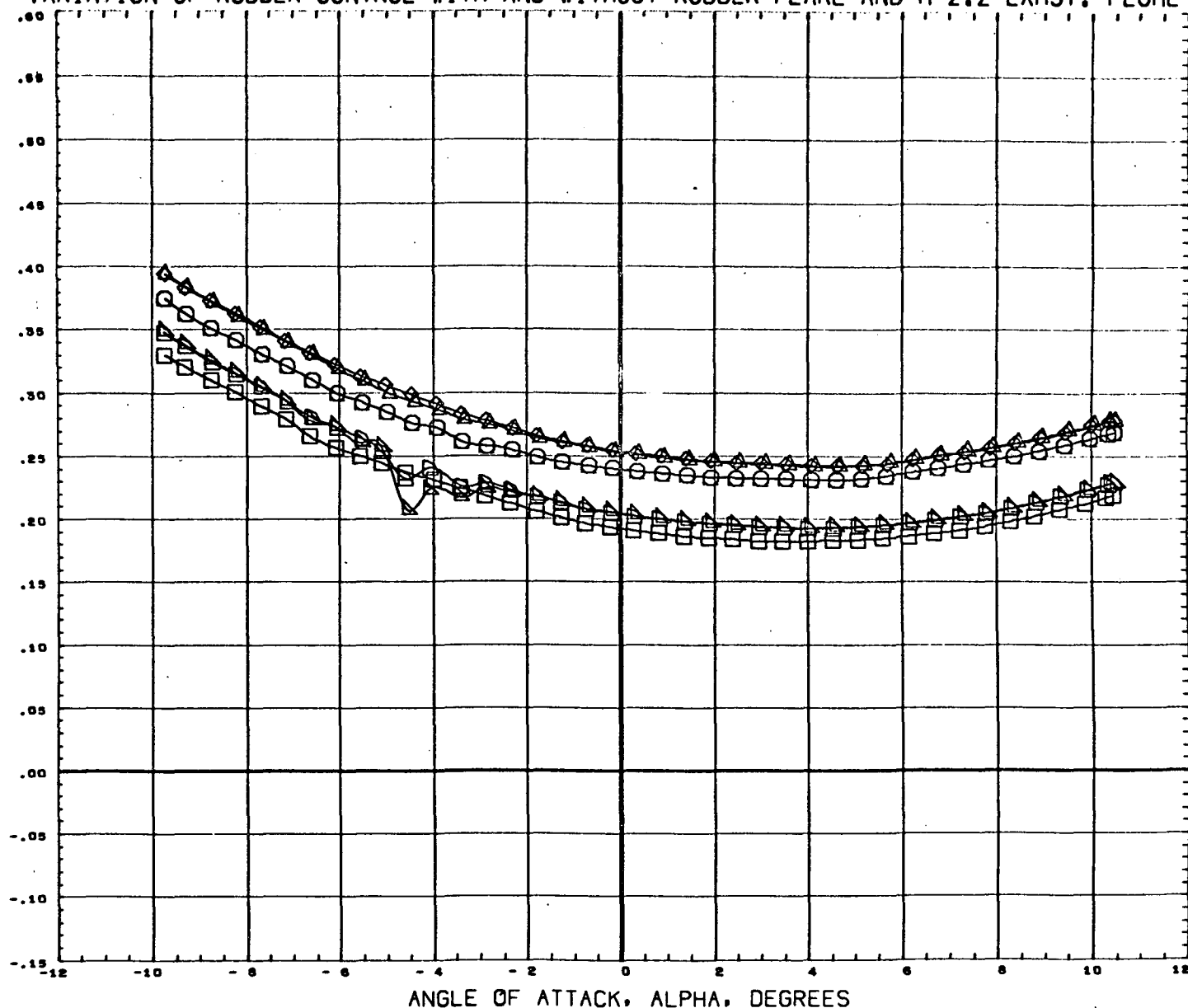
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	557.0004 IN.
(CD7585)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

FOREBODY DRAG COEFFICIENT, CDF



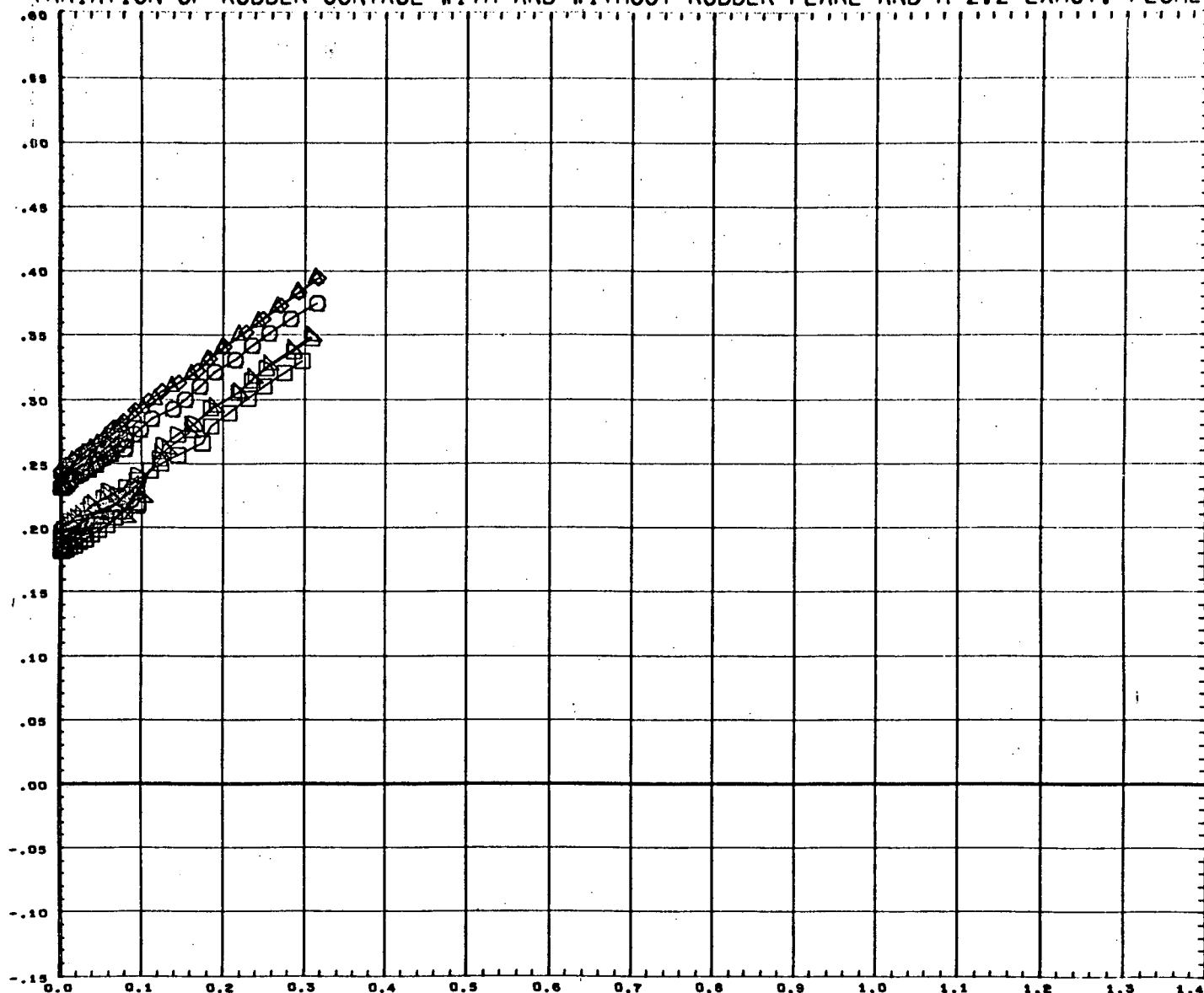
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRF	557.0004 IN.
(CD7585)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRF	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRF	200.0004 IN.
						SCALE	0.0060

MACH 2.20

PAGE 298

# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

FOREBODY DRAG COEFFICIENT, CDF



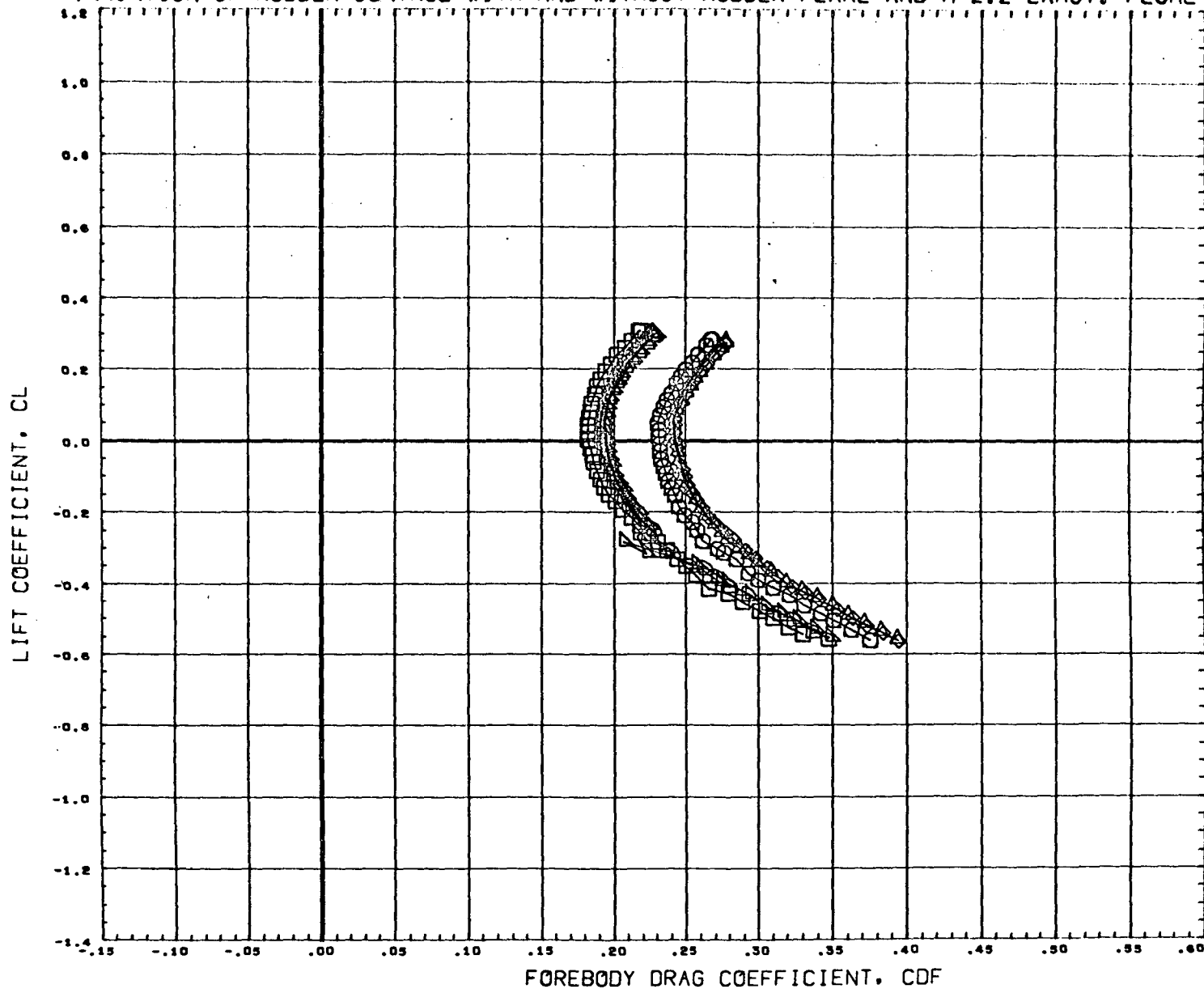
LIFT COEFFICIENT SQUARED, CLSQ

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(C07592)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07596)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(C07598)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(C07581)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	537.0004 IN.
(C07583)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000 IN.
(C07587)	MDAC S-222 COMPOSITE (T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

PAGE 299

# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

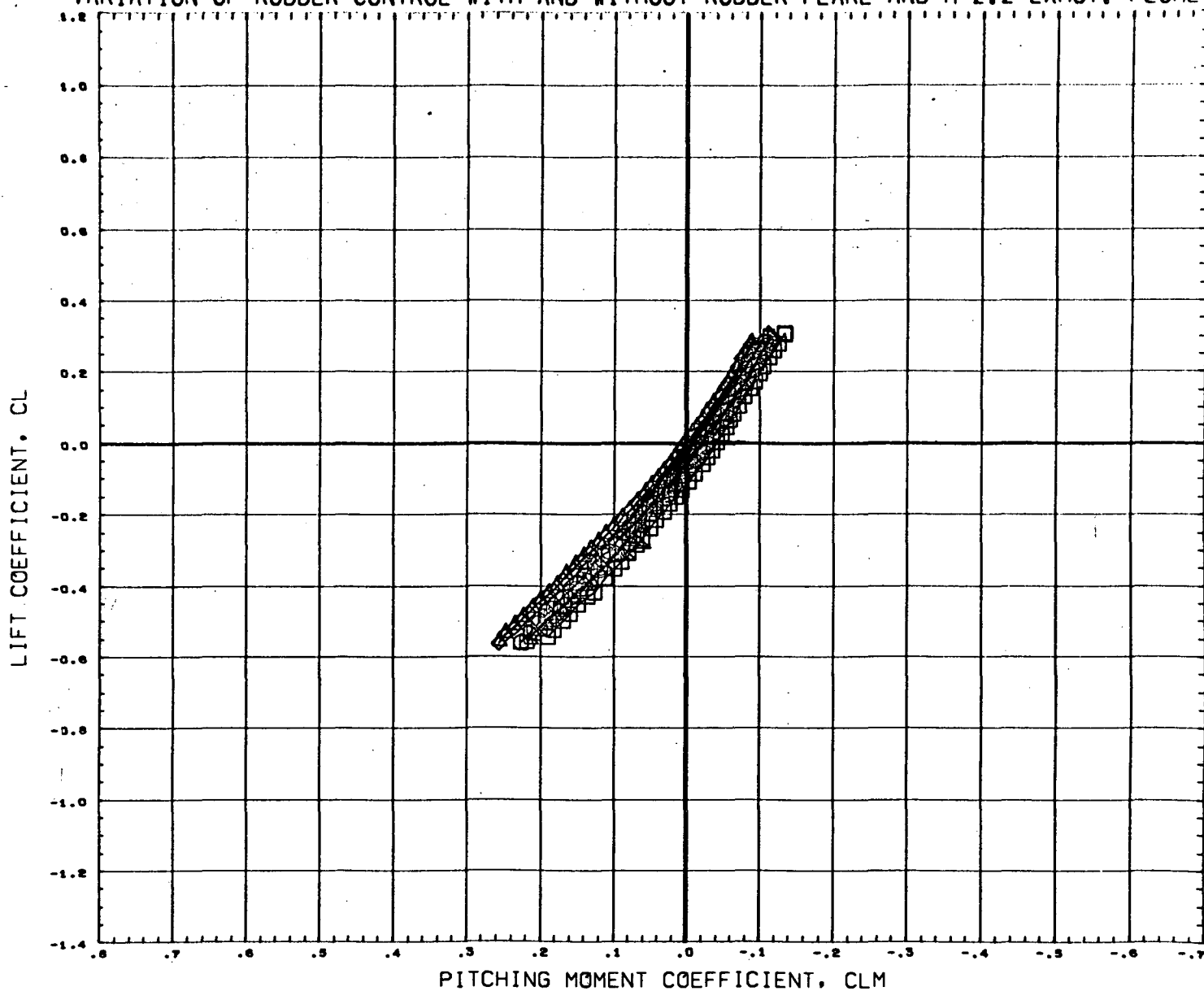


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION		
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	0.000	LREF	609.5004	IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4	0.000	0.000	20.000	10.000	BREF	882.0004	IN.
(CD7581)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRP	957.0004	IN.
(CD7583)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRP	0.0000	IN.
(CD7587)	MDAC S-222 COMPOSITE(T-CG) O1V1T4B7A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 2.20

PAGE 300

# VARIATION OF RUDDER CONTROL WITH AND WITHOUT RUDDER FLARE AND M=2.2 EXHST. PLUME

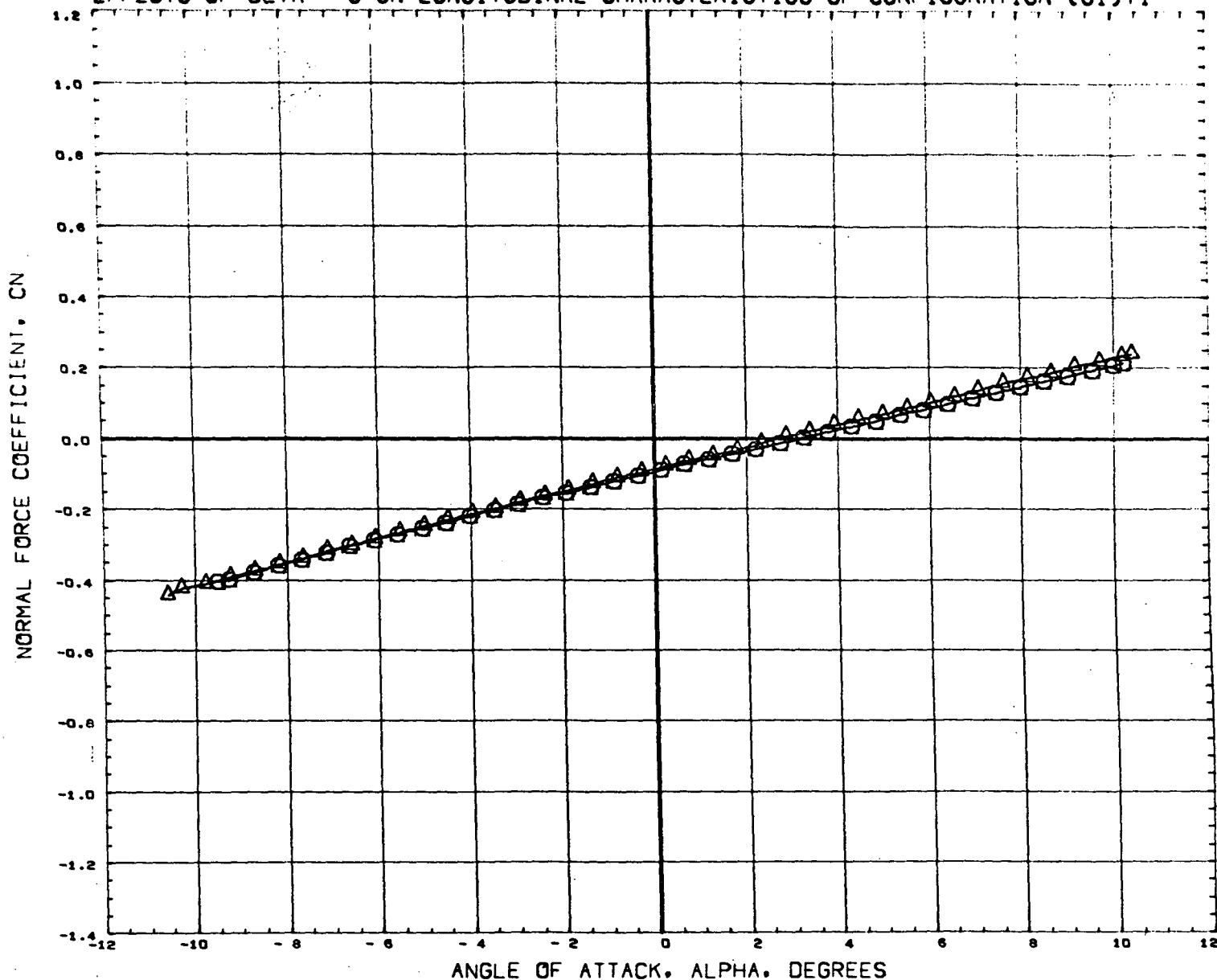


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	RUDFLR	RUDDER	REFERENCE INFORMATION	
(CD7592)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7596)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
(CD7598)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4	0.000	0.000	20.000	10.000	BREF	882.0004 IN.
(CD7581)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4+PLU(2.2)	0.000	0.000	0.000	0.000	XMRRP	557.0004 IN.
(CD7585)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4+PLU(2.2)	0.000	0.000	20.000	0.000	YMRRP	0.0000 IN.
(CD7587)	MDAC S-222 COMPOSITE(T-CG) O1V1T487A1-4+PLU(2.2)	0.000	0.000	20.000	10.000	ZMRRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



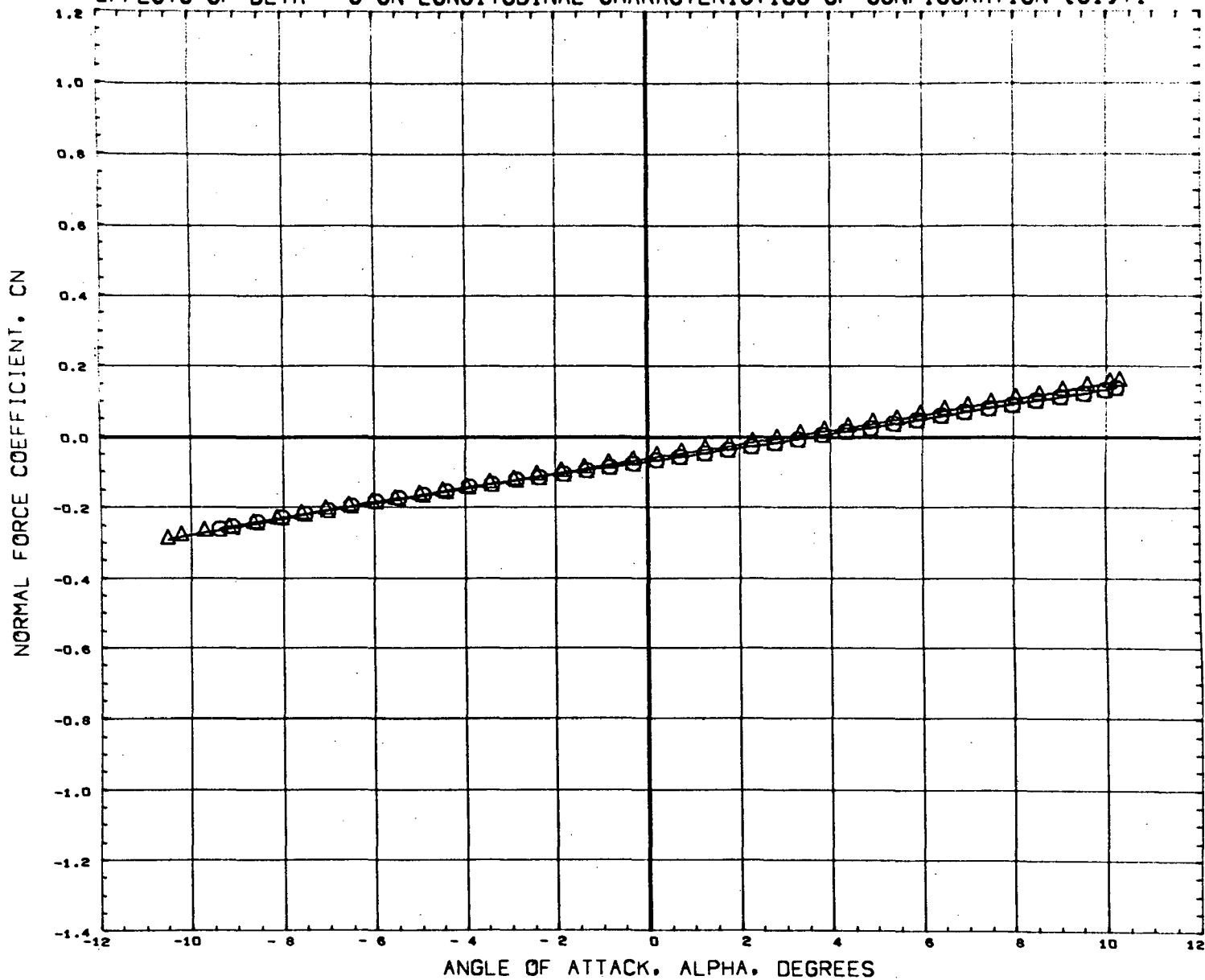
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C07447)	MDAC S-222 COMPOSITE (T-CG) (01)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C07449)	MDAC S-222 COMPOSITE (T-CG) (01)T1	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



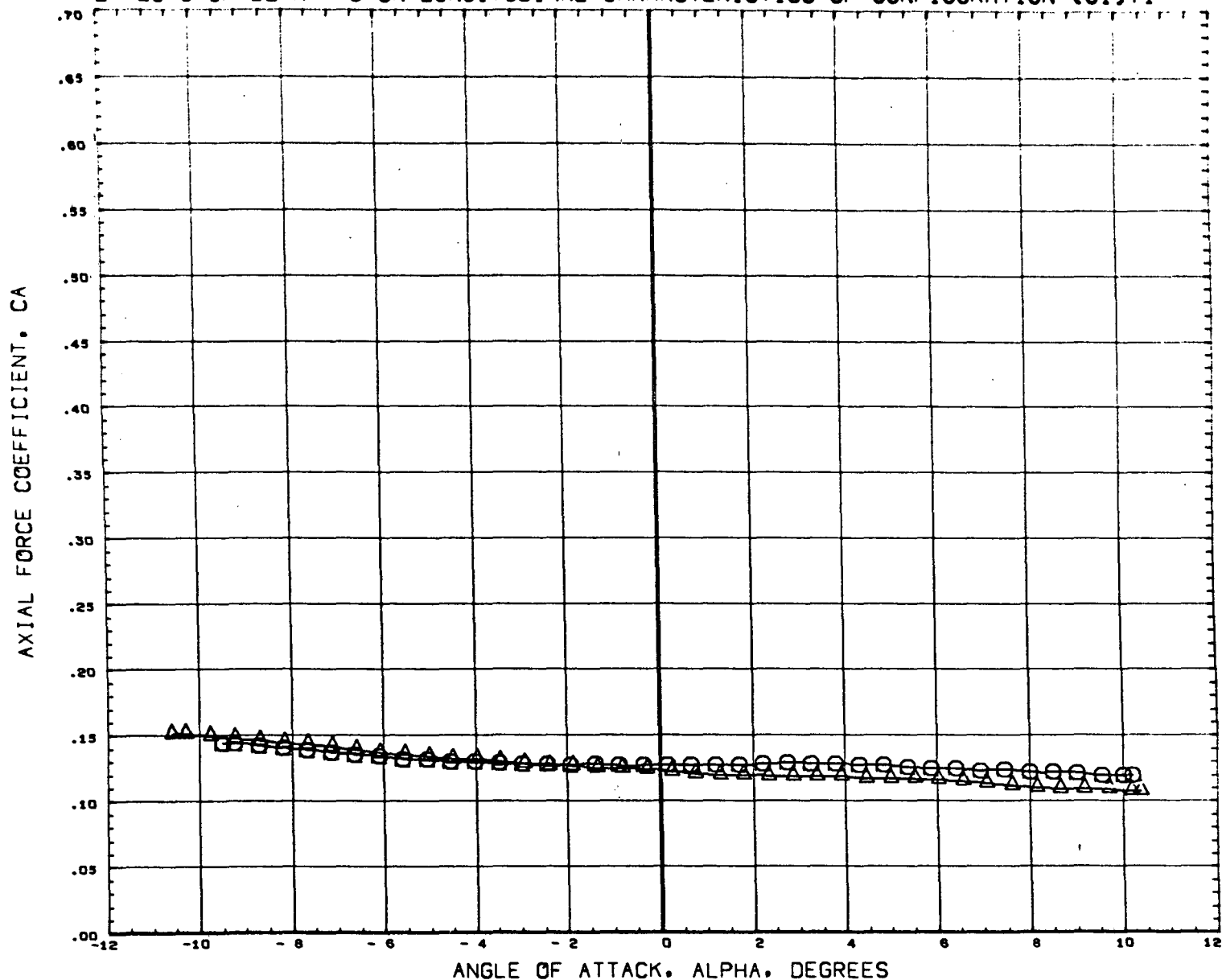
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 (CD7447) MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (CD7449) MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 4.47

PAGE 303

# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



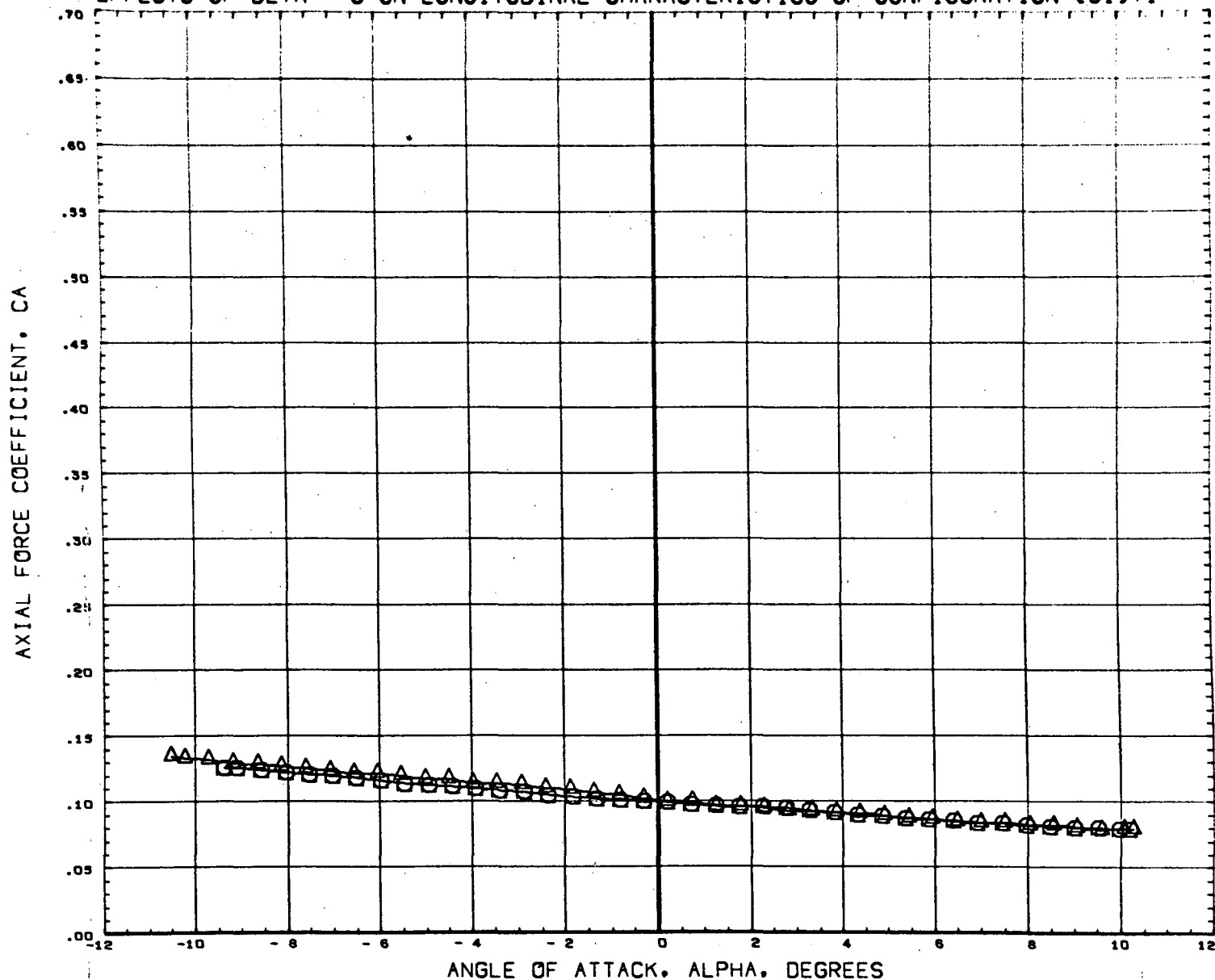
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 (CD7447)  $\bigcirc$  MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (CD7449)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



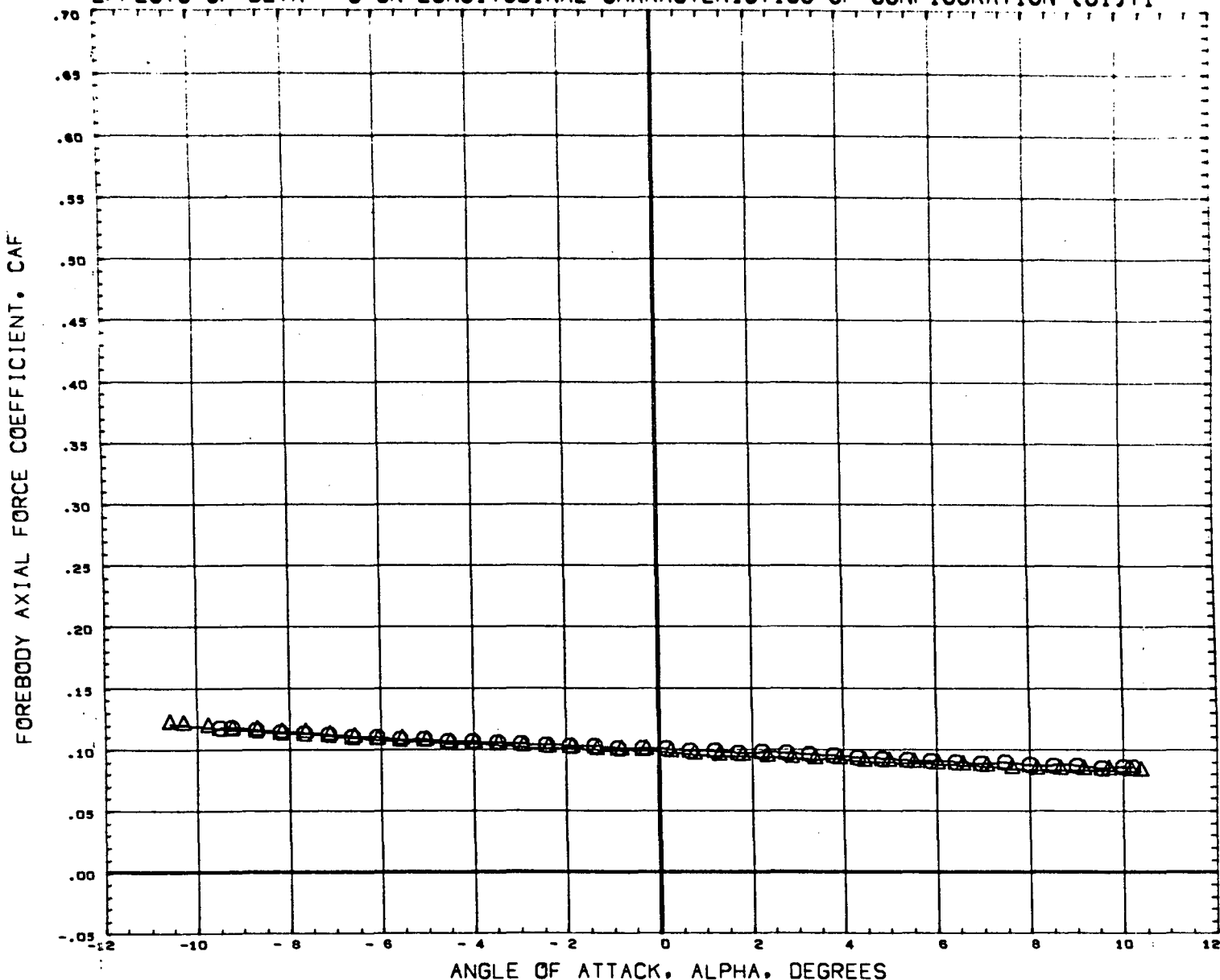
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447) MDAC S-222 COMPOSITE(T-CG) (01)T1  
 (CD7449) MDAC S-222 COMPOSITE(T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 4.47

PAGE 305

# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



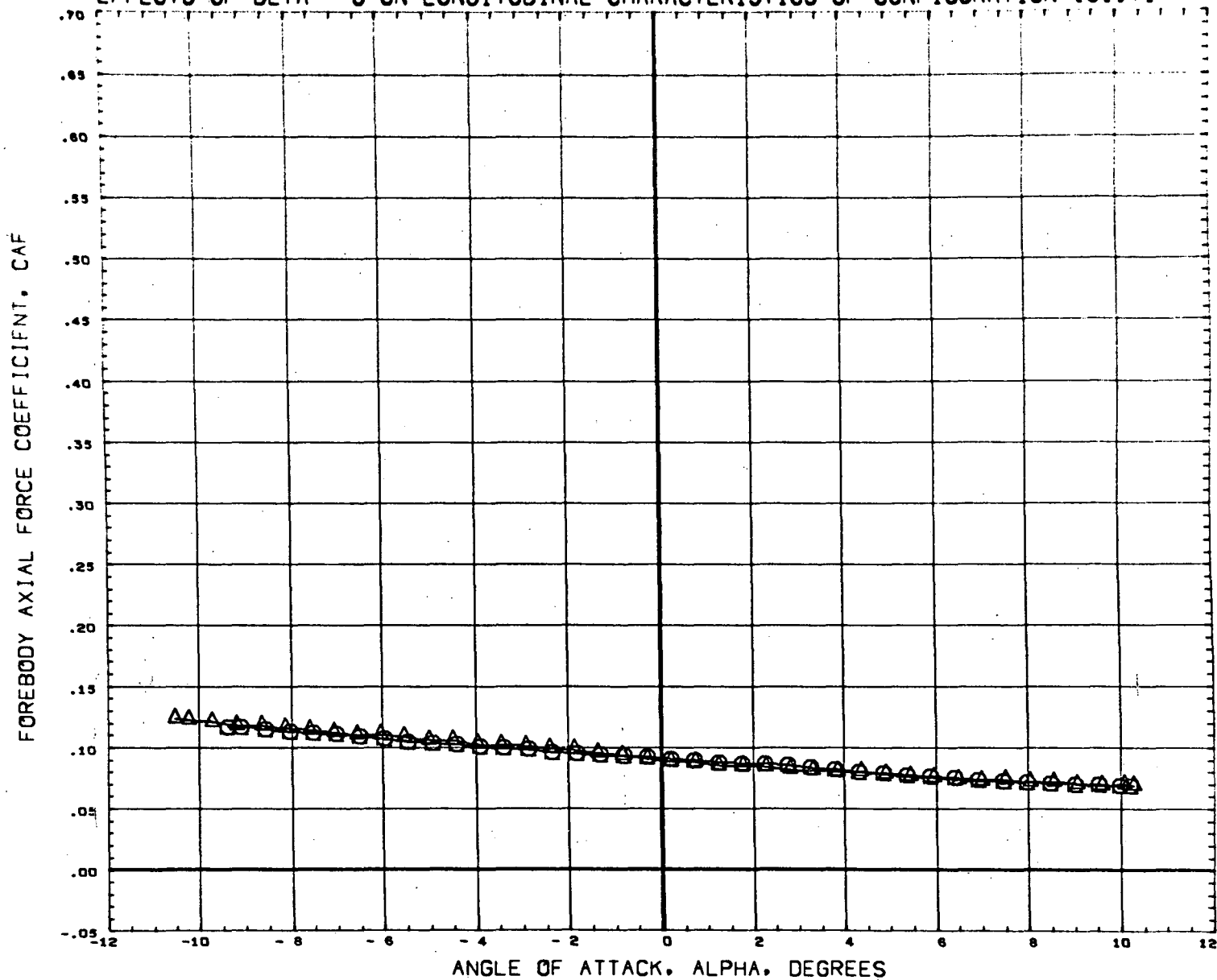
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447)  $\Delta$  MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (CD7449)  $\Delta$  MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XM RP	557.0004 IN.
				YM RP	0.0000 IN.
				ZM RP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



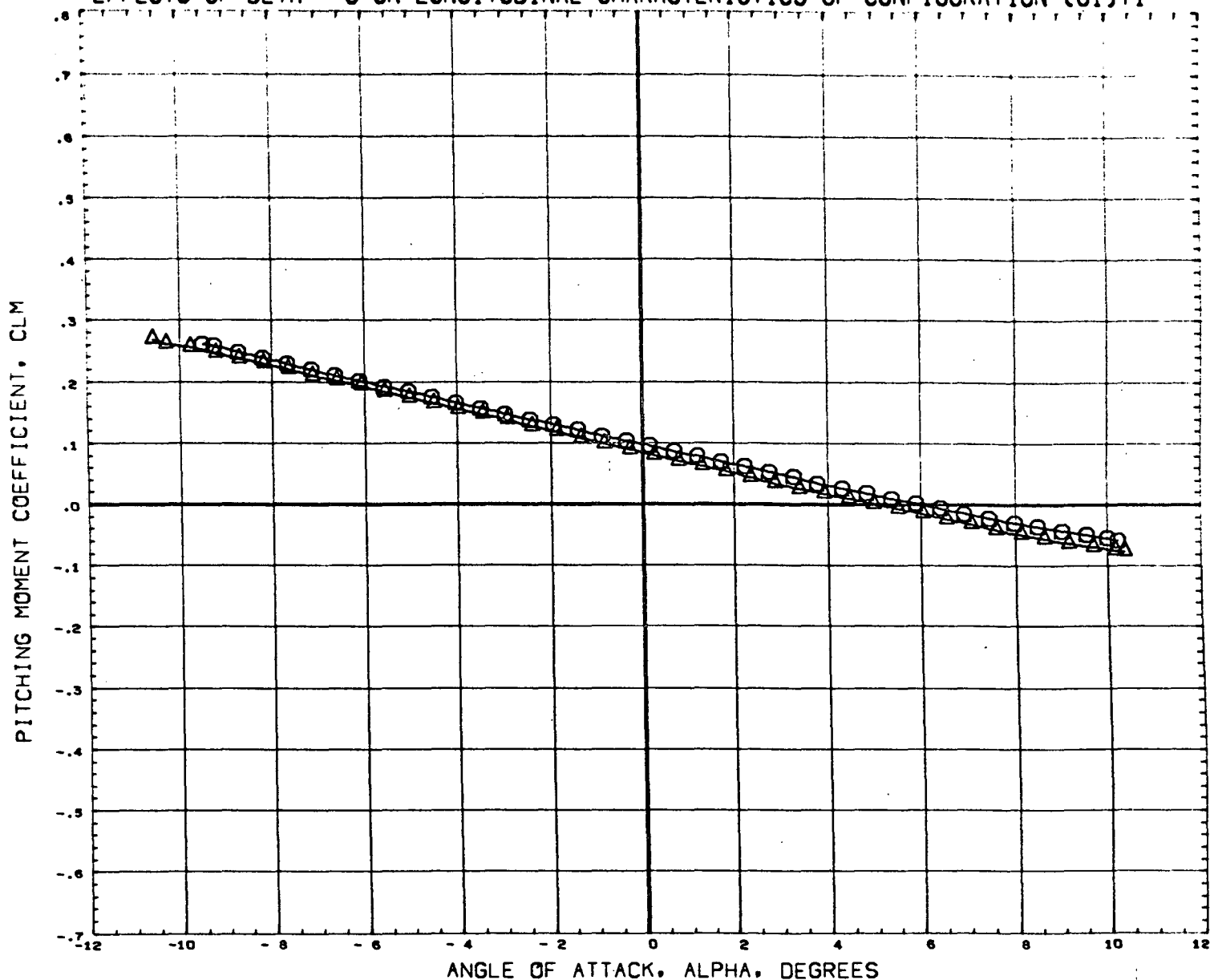
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7447)	MDAC S-222 COMPOSITE (T-CG) (01)T1
(CD7449)	MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION
0.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF 609.5004 IN.
				BREF 882.0004 IN.
				XMRP 557.0004 IN.
				YMRP 0.0000 IN.
				ZMRP 200.0004 IN.
				SCALE 0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



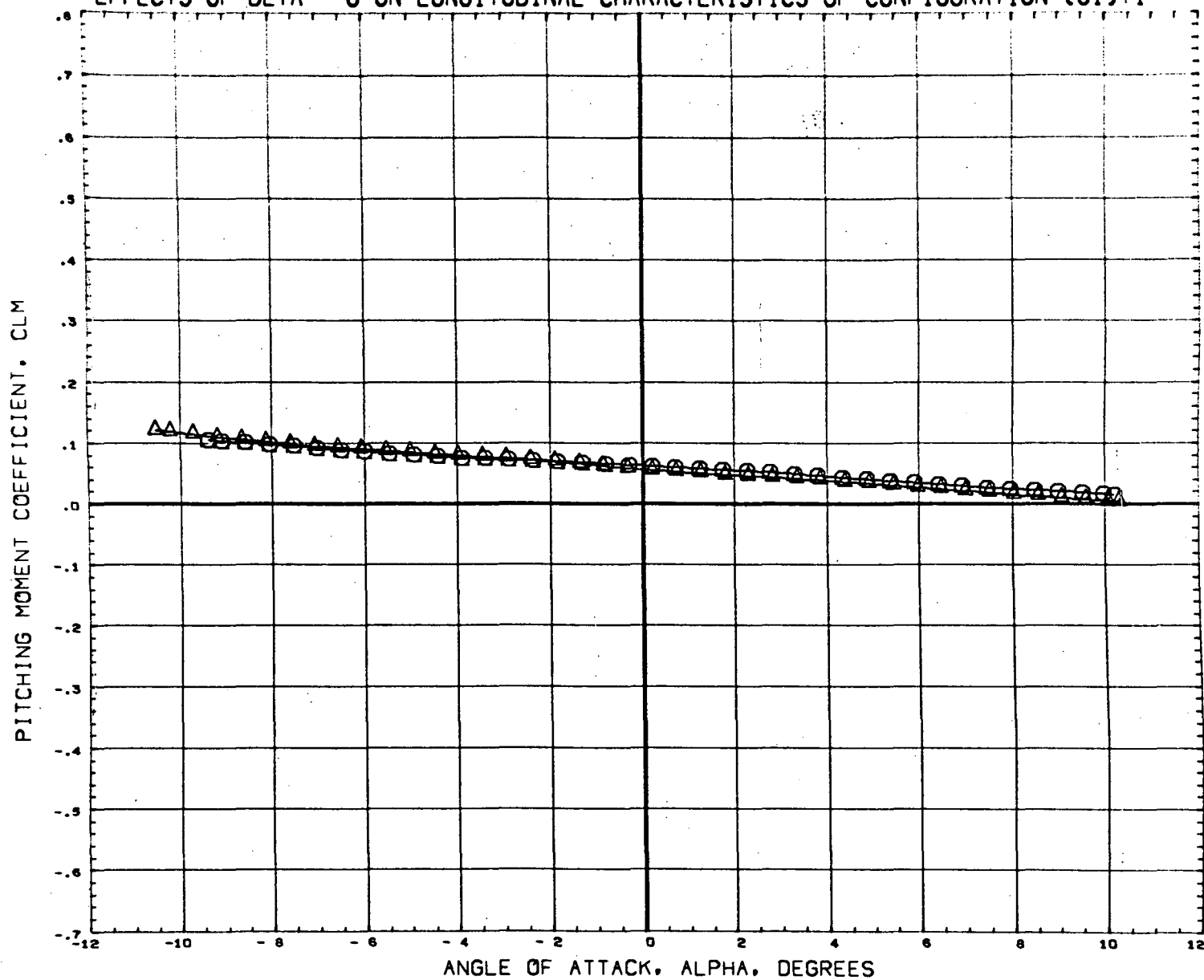
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447) MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (CD7449) MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



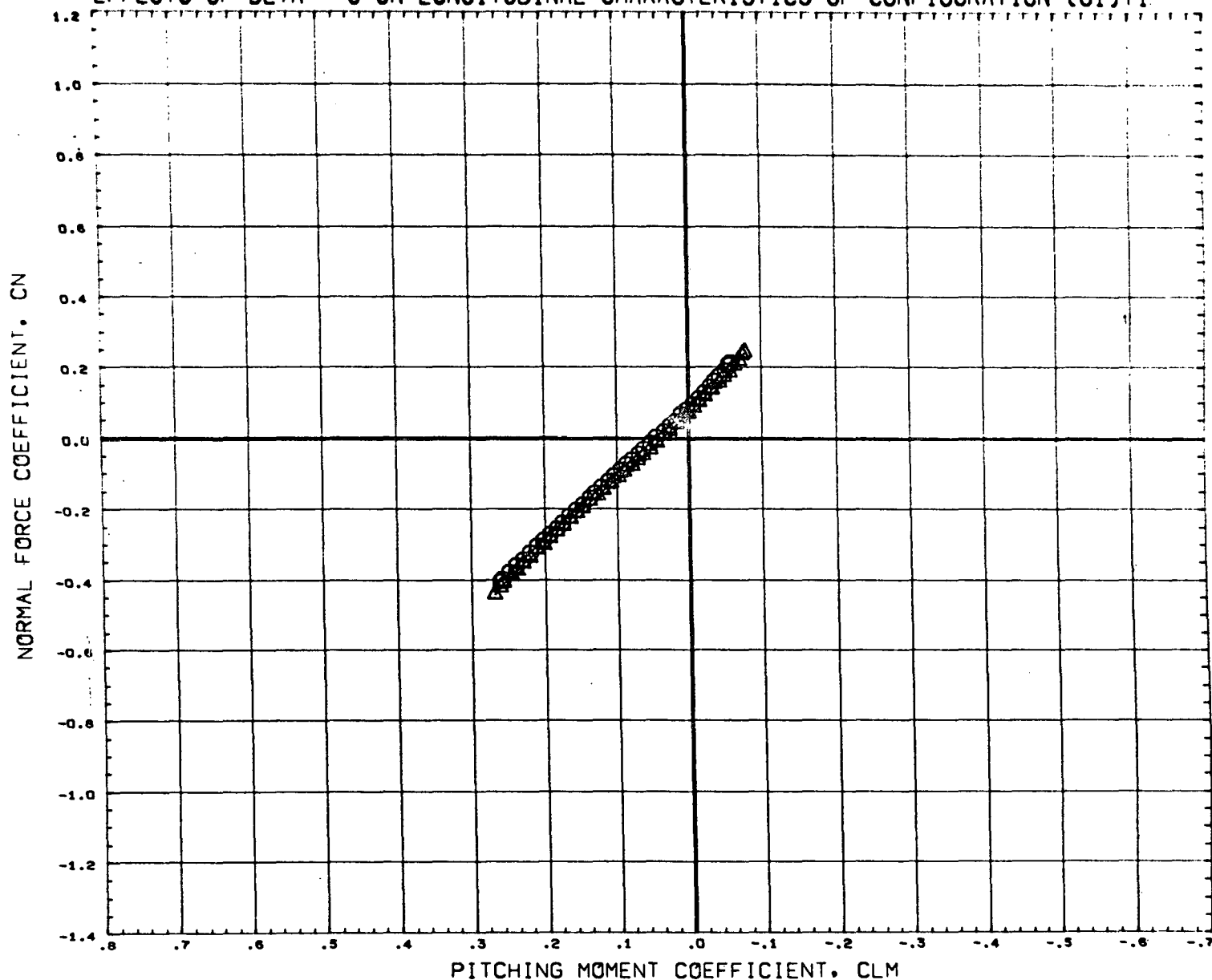
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447)  $\bigcirc$  MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (CD7449)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060



MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7447)  MDAC S-222 COMPOSITE (T-CG) (01)T1  
(CD7449)  MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

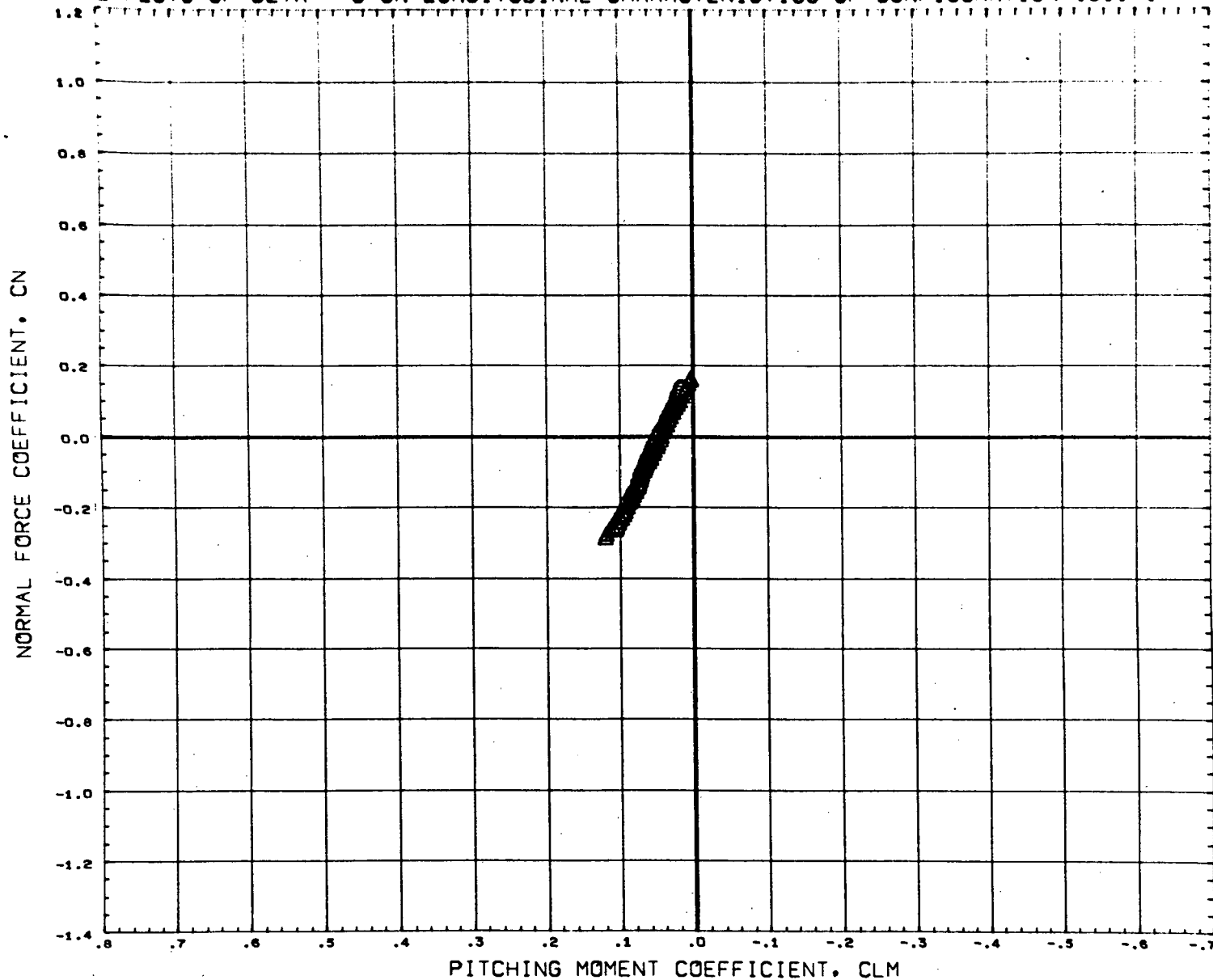
MACH

2.20



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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



DATA SET SYMBOL CONFIGURATION DESCRIPTION

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 (CD7449)  MDAC S-222 COMPOSITE (T-CG) (01)T1

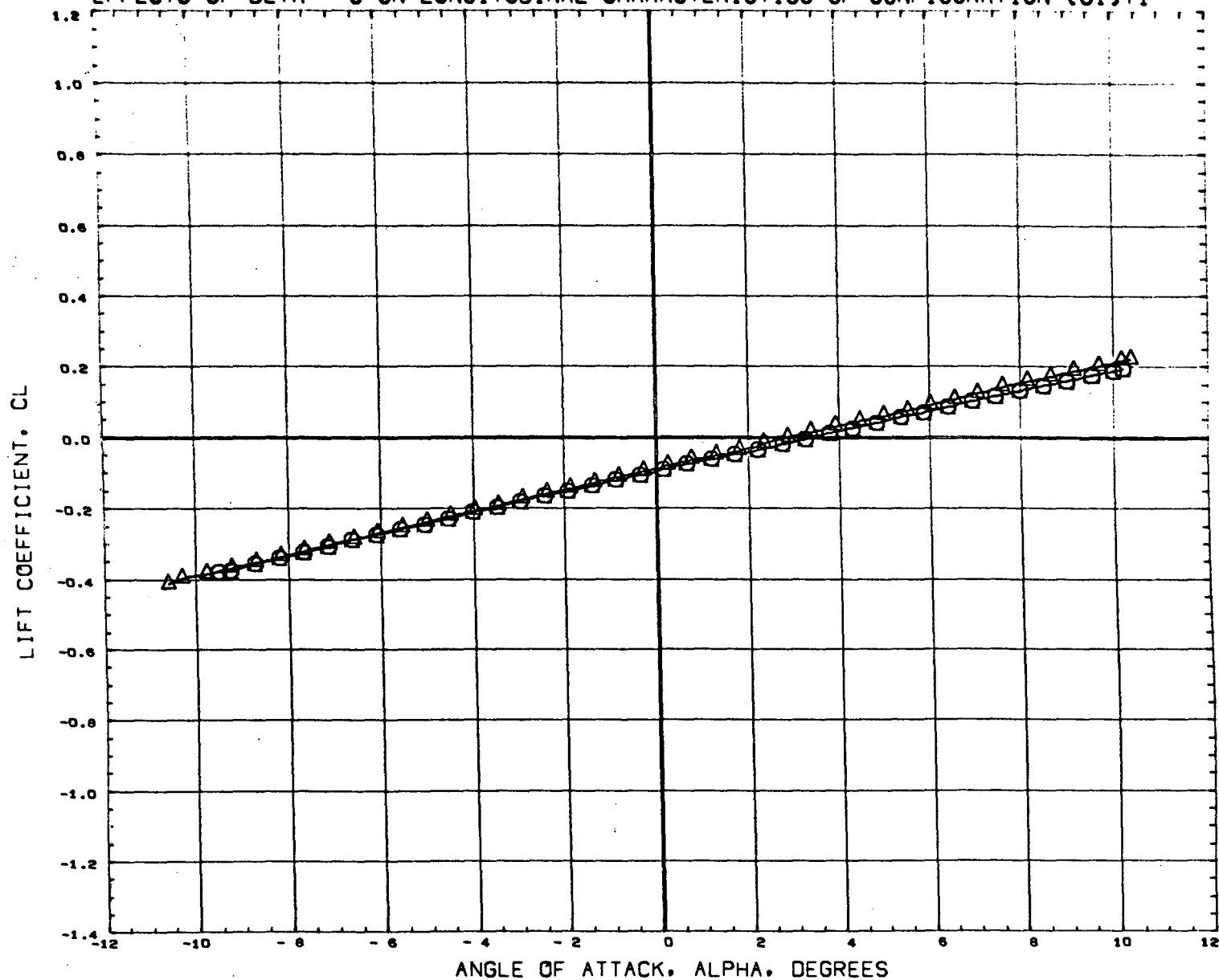
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



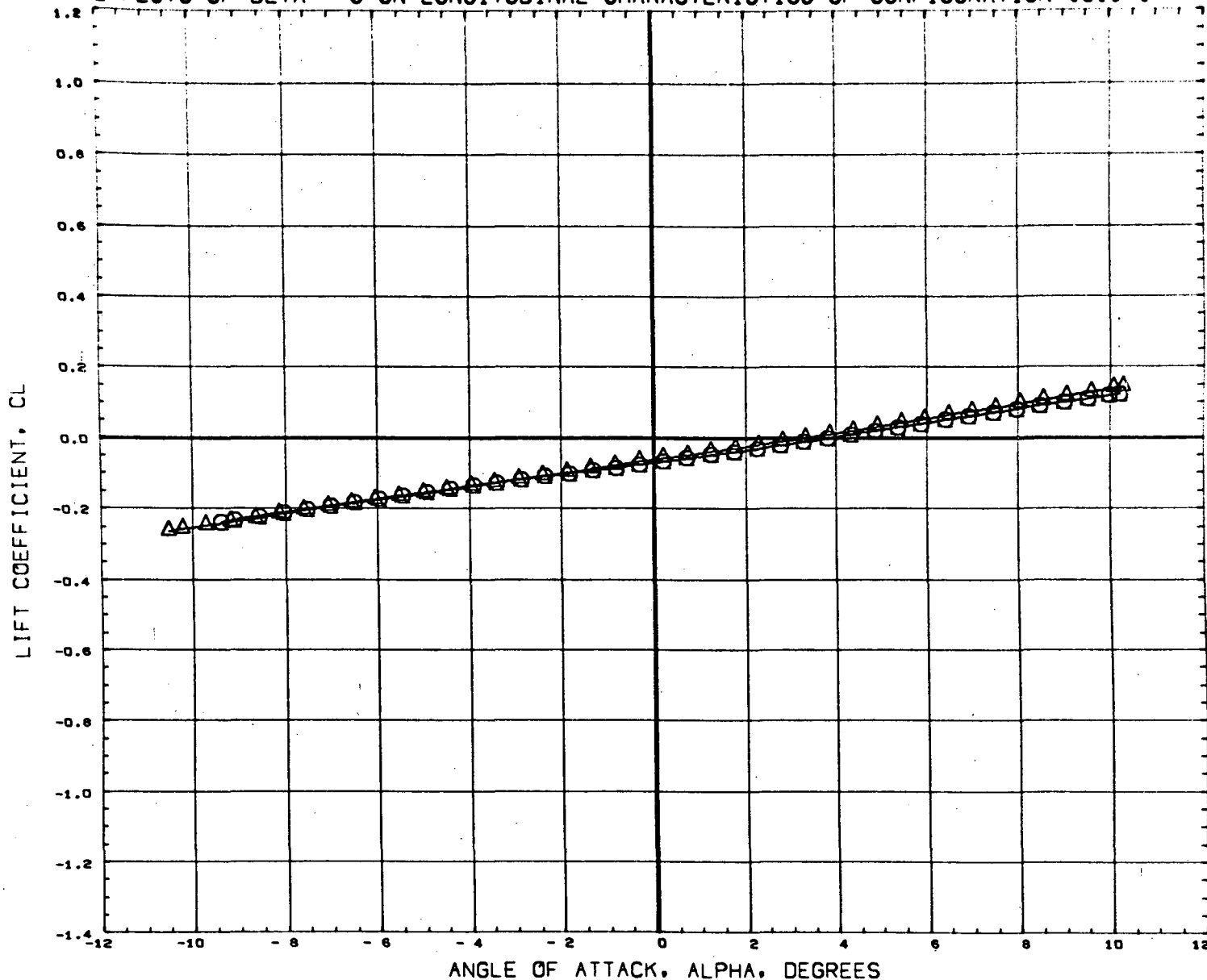
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
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 (CD7449) MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447) MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (CD7449) MDAC S-222 COMPOSITE (T-CG) (01)T1

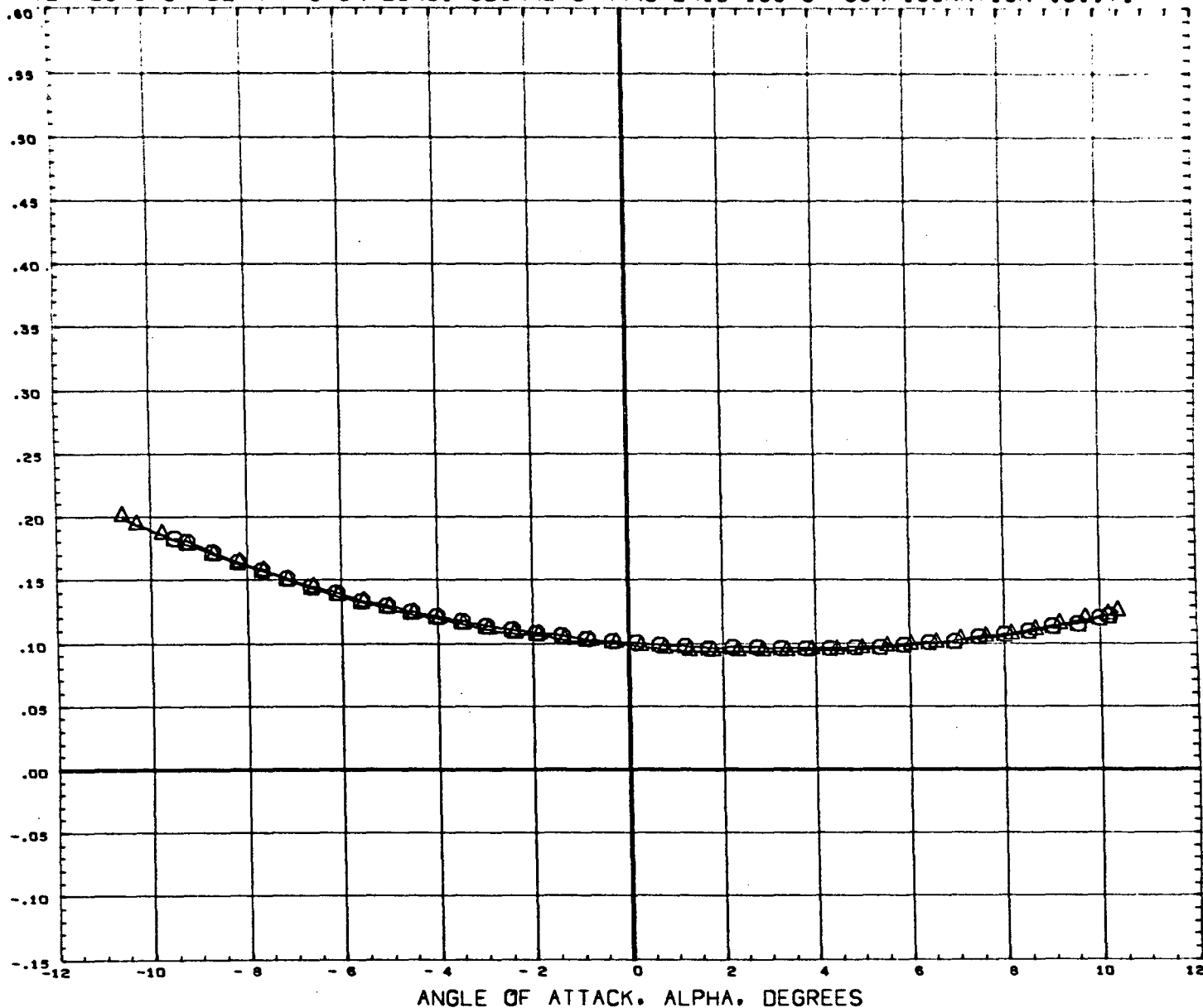
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1

FOREBODY DRAG COEFFICIENT, CDF



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447) MDAC S-222 COMPOSITE(T-CG) (01)T1  
 (CD7449) MDAC S-222 COMPOSITE(T-CG) (01)T1

BETA ELEVTR ATLON RUDDER  
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 6.000 0.000 0.000 0.000

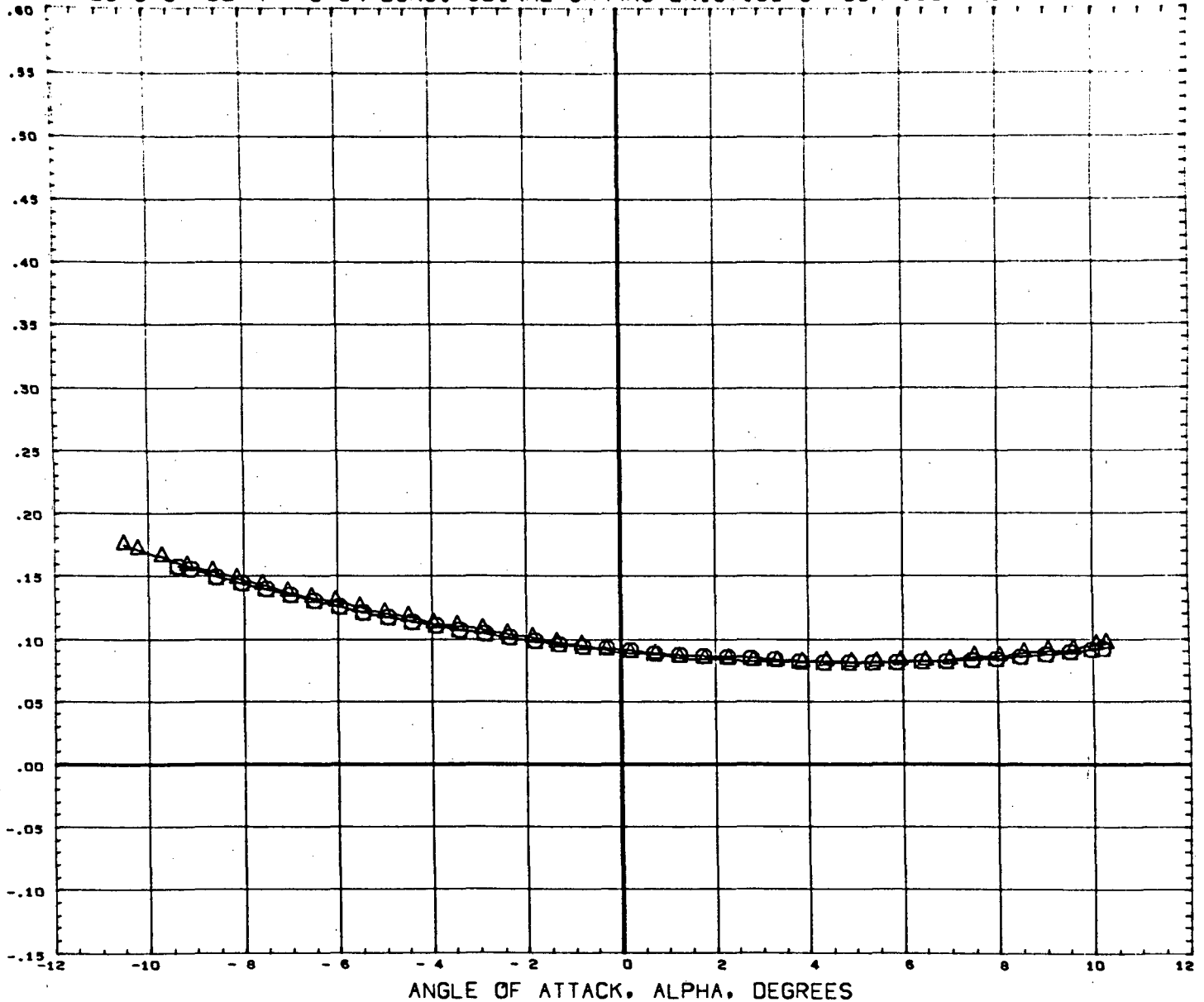
REFERENCE INFORMATION  
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 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1

FOREBODY DRAG COEFFICIENT, CDF



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7447)	MDAC S-222 COMPOSITE (T-CG) (01)T1
(CD7449)	MDAC S-222 COMPOSITE (T-CG) (01)T1

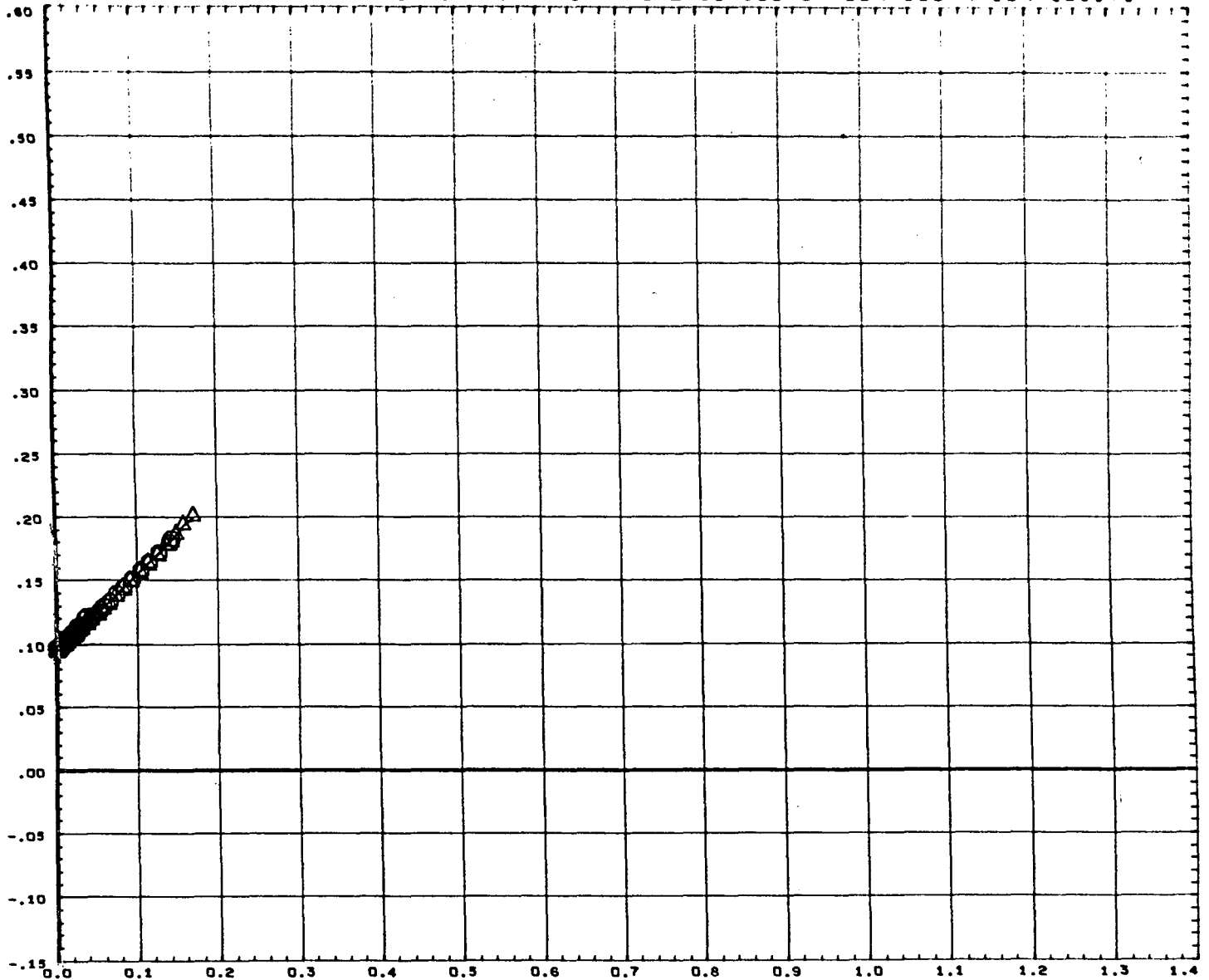
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 4.47



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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQ

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447)  MDAC S-222 COMPOSITE (T-CG) (01) T1  
 (CD7449)  MDAC S-222 COMPOSITE (T-CG) (01) T1

BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

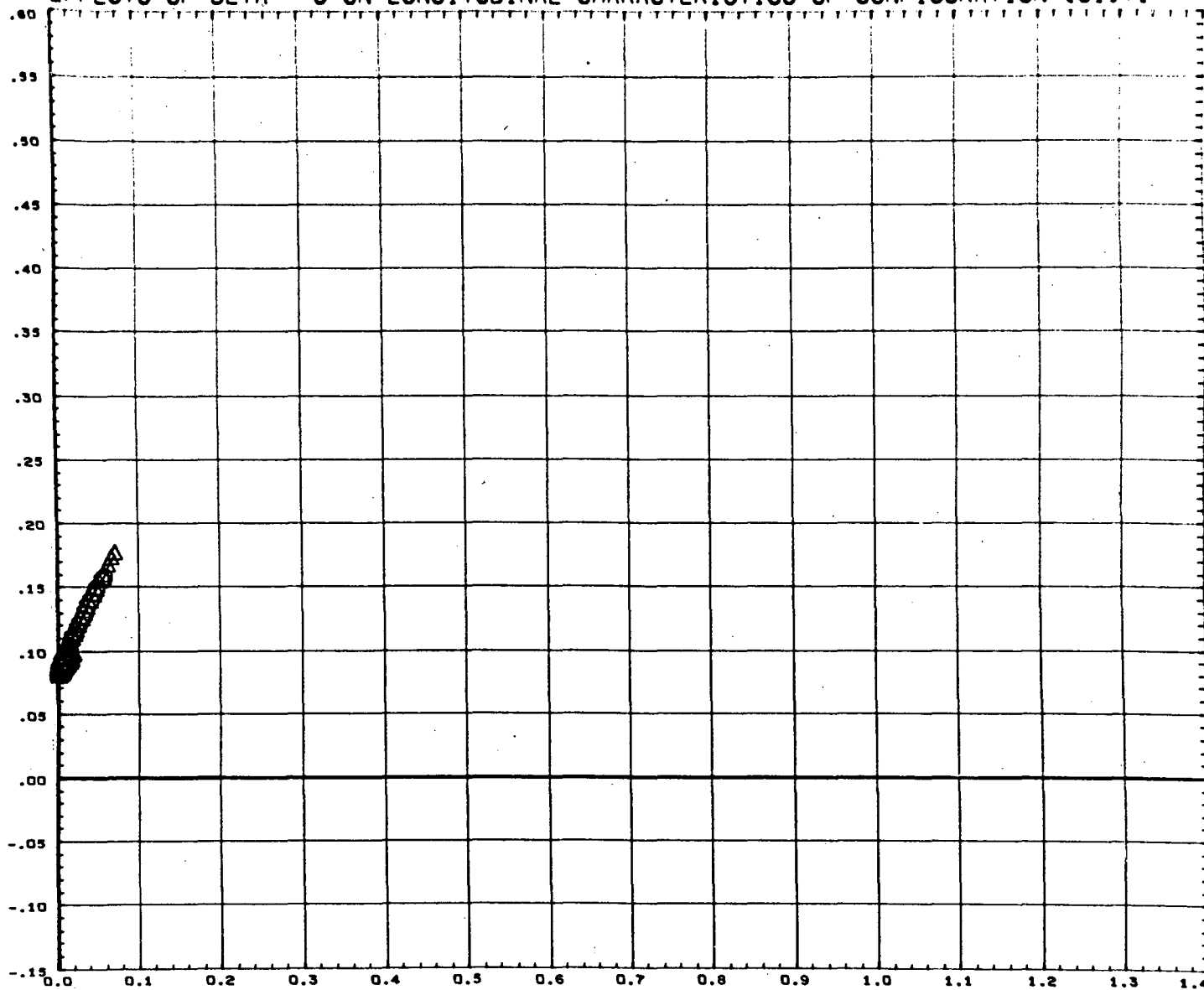
MACH

2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQR

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447) MDAC S-222 COMPOSITE (T-CG) (01) T1  
 (CD7449) MDAC S-222 COMPOSITE (T-CG) (01) T1

BETA ELEVTR AILRON RUDDER  
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 6.000 0.000 0.000 0.000

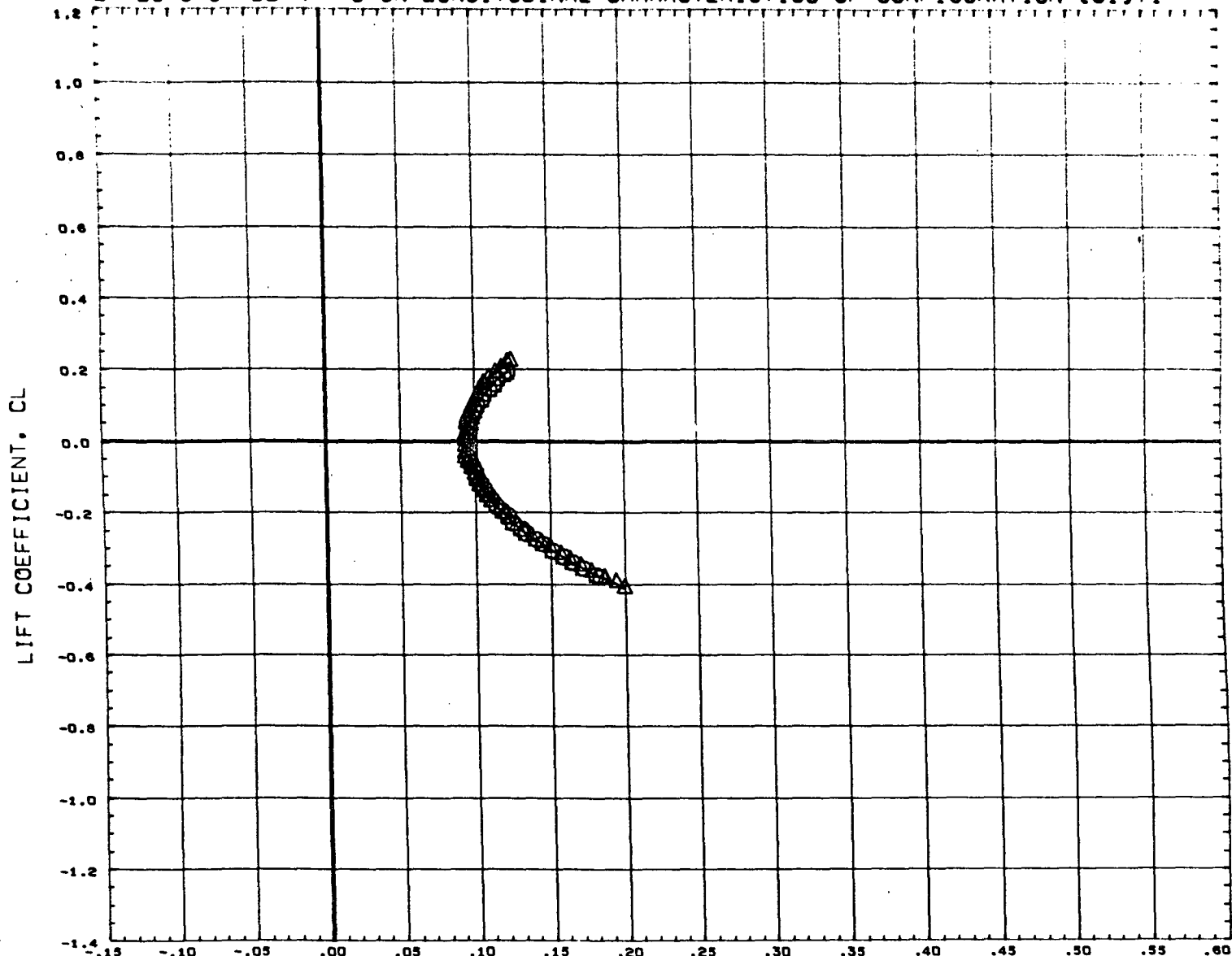
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 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

MACH

4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



## FOREBODY DRAG COEFFICIENT, CDF

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7447) MDAC S-222 COMPOSITE (T-CG) (01)T1  
(CD7449) MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	290.0004 IN.
SCALE	0.0060

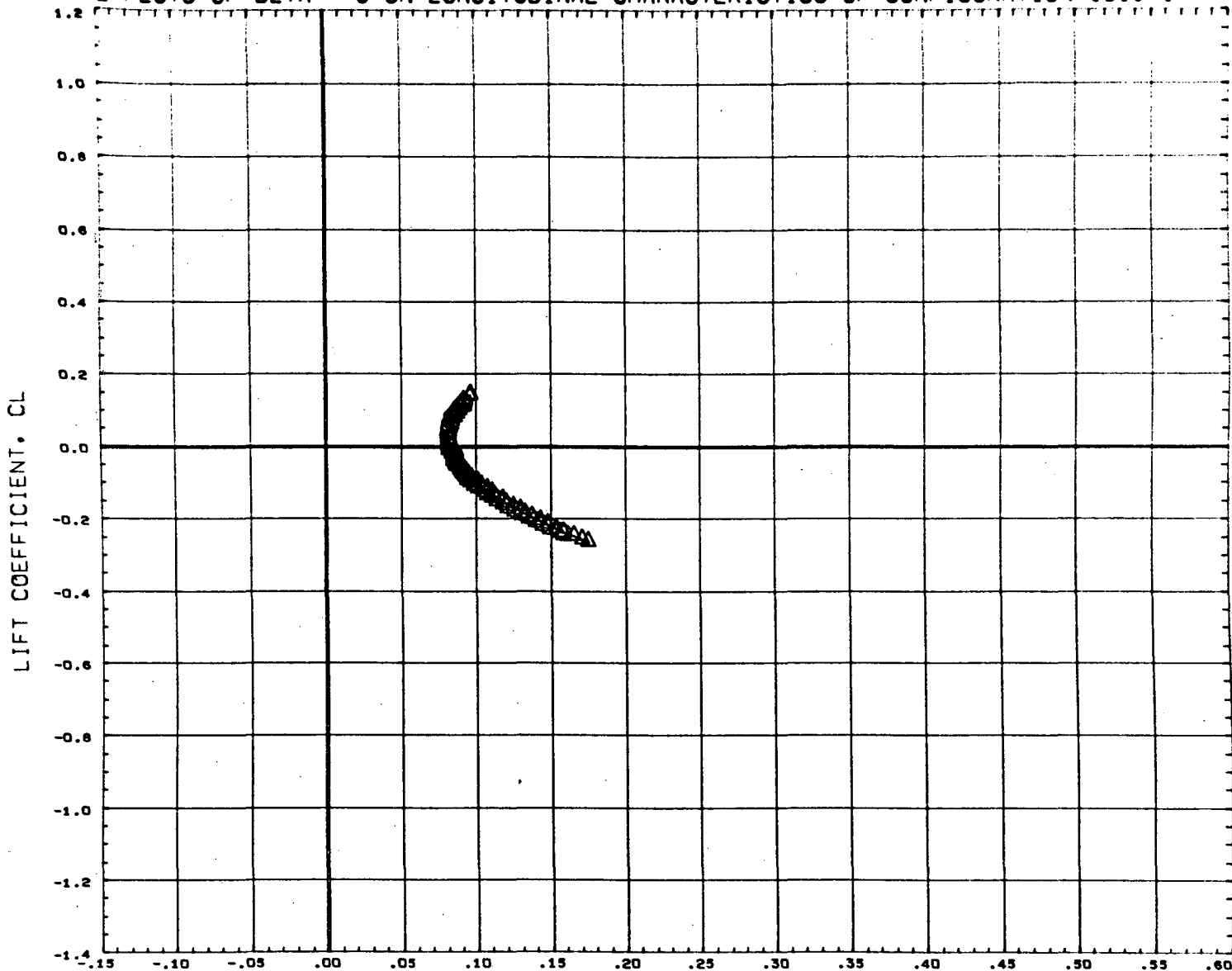
MACH

2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1

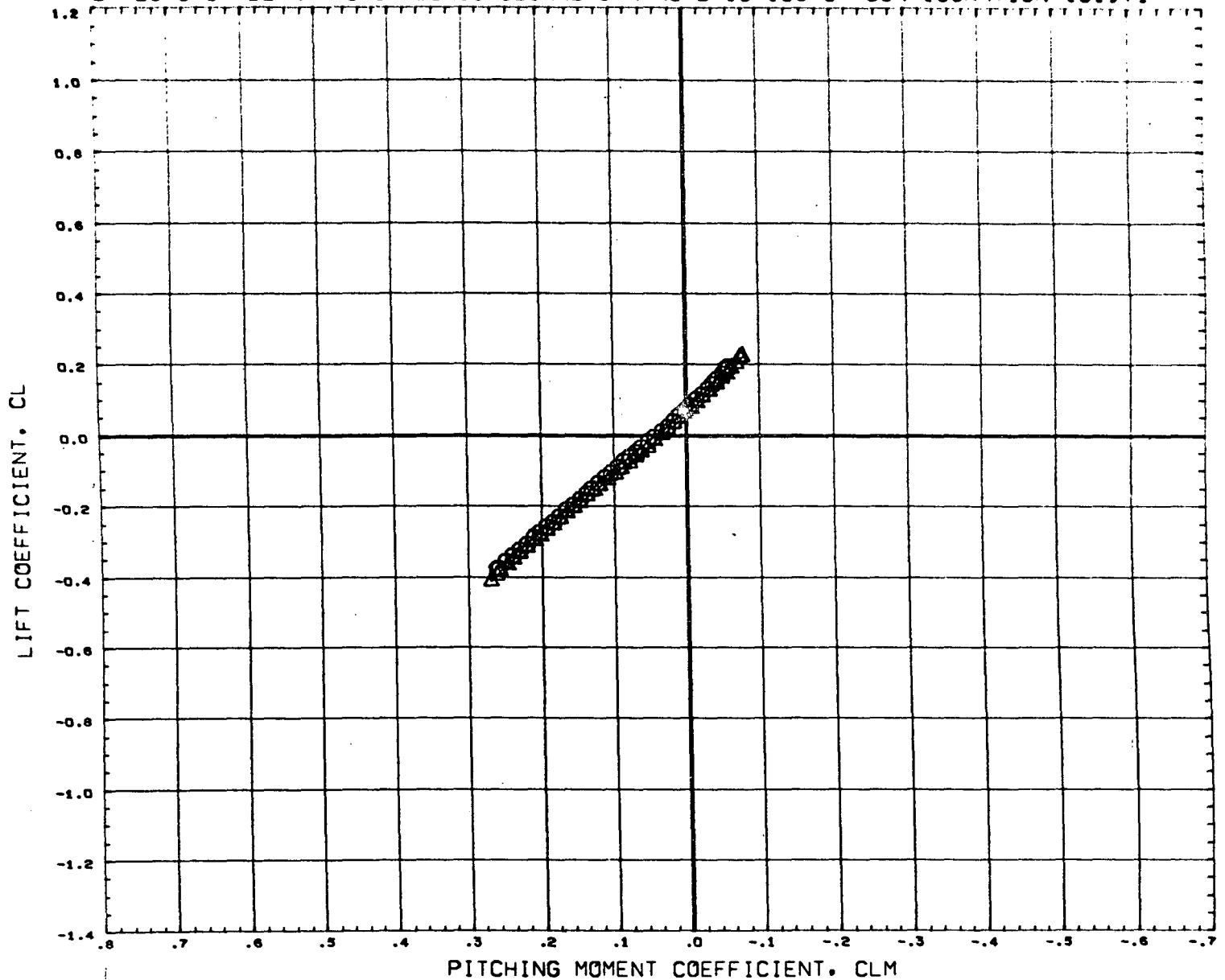


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7447)	MDAC S-222 COMPOSITE(T-CG) (01)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7449)	MDAC S-222 COMPOSITE(T-CG) (01)T1	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						SREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447) MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (CD7449) MDAC S-222 COMPOSITE (T-CG) (01)T1

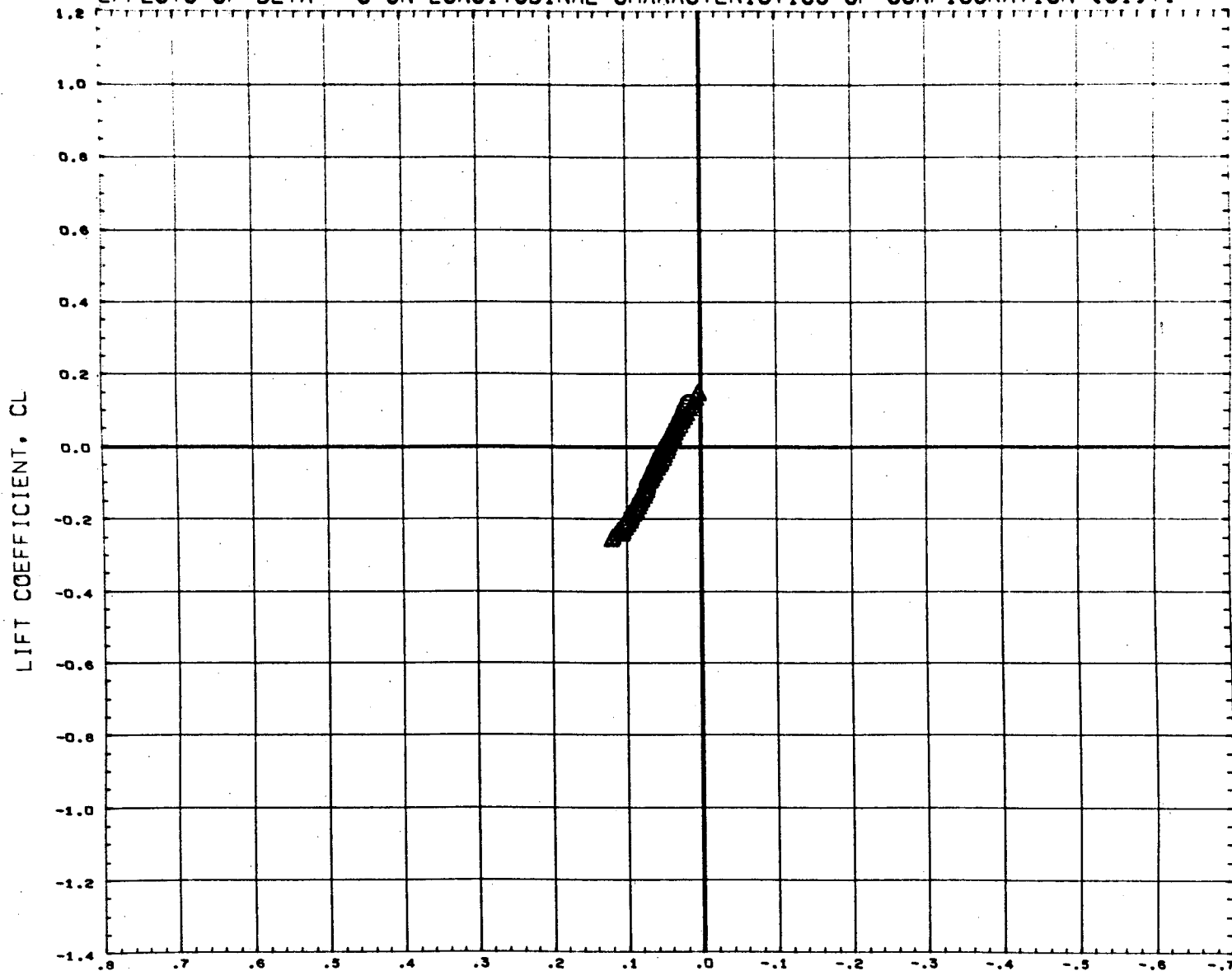
BETA ELEVTR AILRON RUDDER  
 0.000 0.000 0.000 0.000  
 6.000 0.000 0.000 0.000

REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T1



PITCHING MOMENT COEFFICIENT, CLM

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7447) MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (CD7449) MDAC S-222 COMPOSITE (T-CG) (01)T1

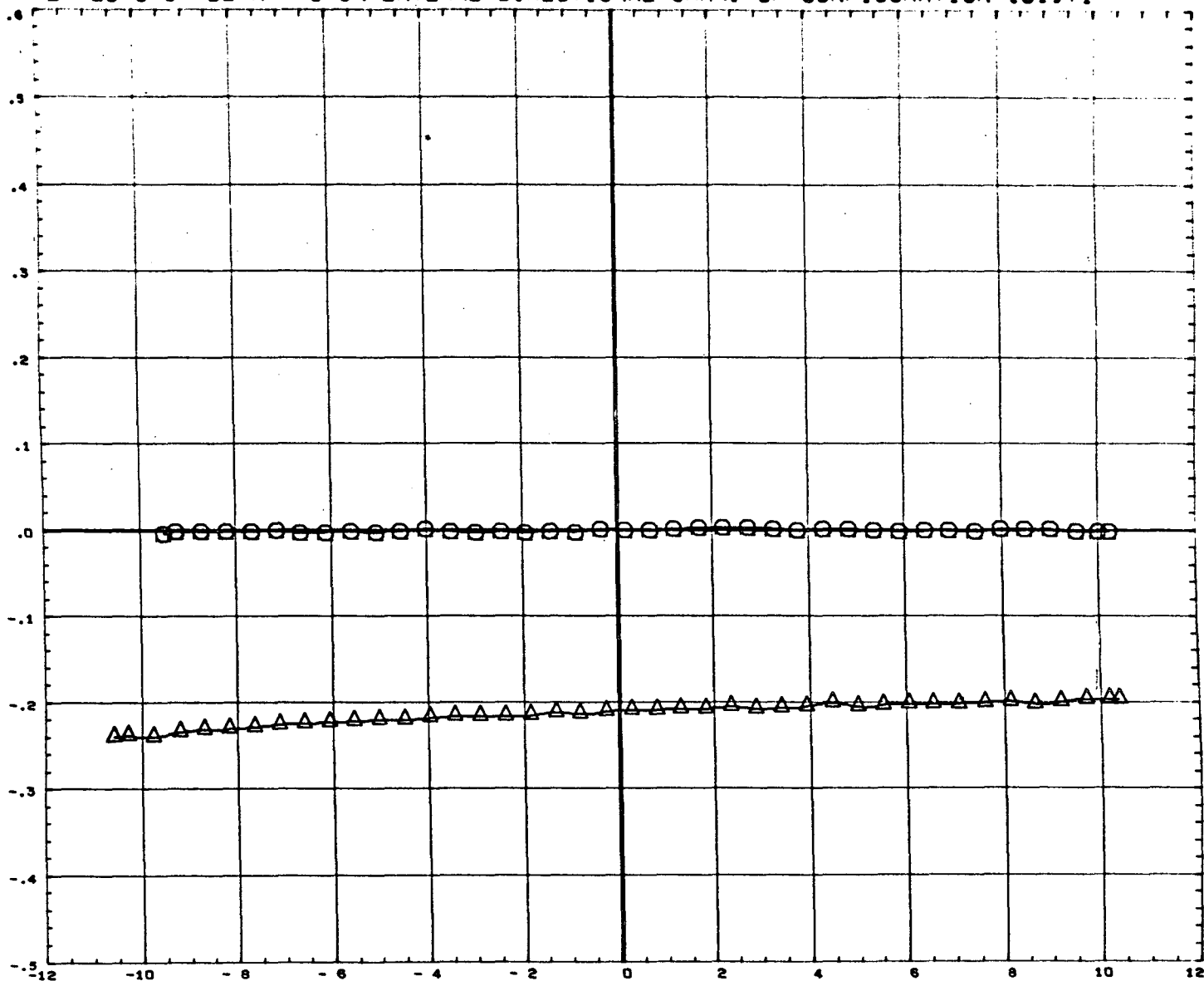
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T1

LATERAL FORCE COEFFICIENT, CY



ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
(RD7447) (01)T1  
(RD7449) (01)T1

BETA ELEVTR AILRON RUDDER  
0.000 0.000 0.000 0.000  
6.000 0.000 0.000 0.000

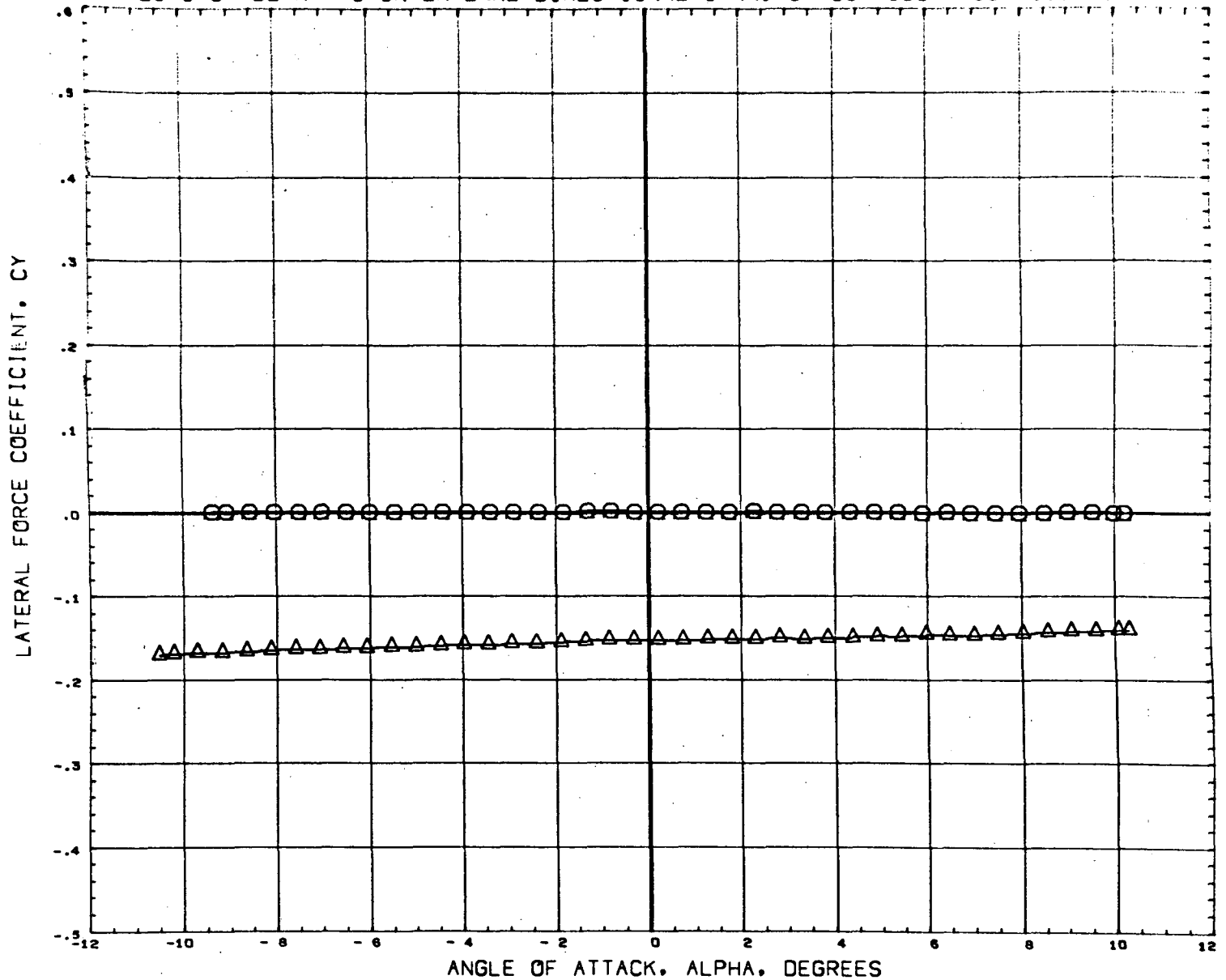
REFERENCE INFORMATION  
SREF 3155.3040 SQ.FT.  
LREF 609.5004 IN.  
BREF 882.0004 IN.  
XMRP 557.0004 IN.  
YMRP 0.0000 IN.  
ZMRP 200.0004 IN.  
SCALE 0.0060

MACH

2.20

PAGE 322

# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T1



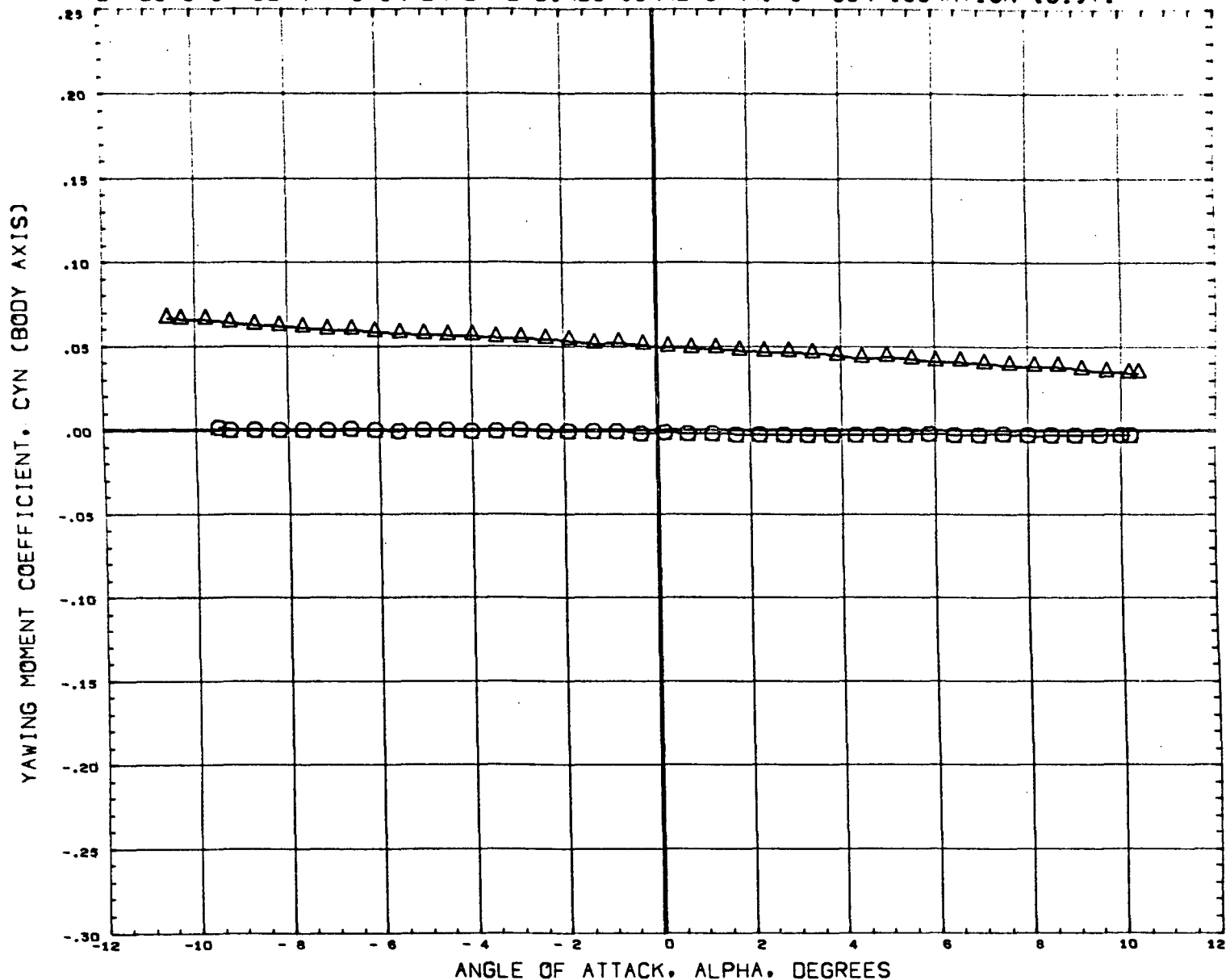
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
(RD7447) MDAC S-222 COMPOSITE (T-CG) (01)T1  
(RD7449) MDAC S-222 COMPOSITE (T-CG) (01)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T1



DATA SET SYMBOL      CONFIGURATION DESCRIPTION  
 (RD7447)      MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (RD7449)      MDAC S-222 COMPOSITE (T-CG) (01)T1

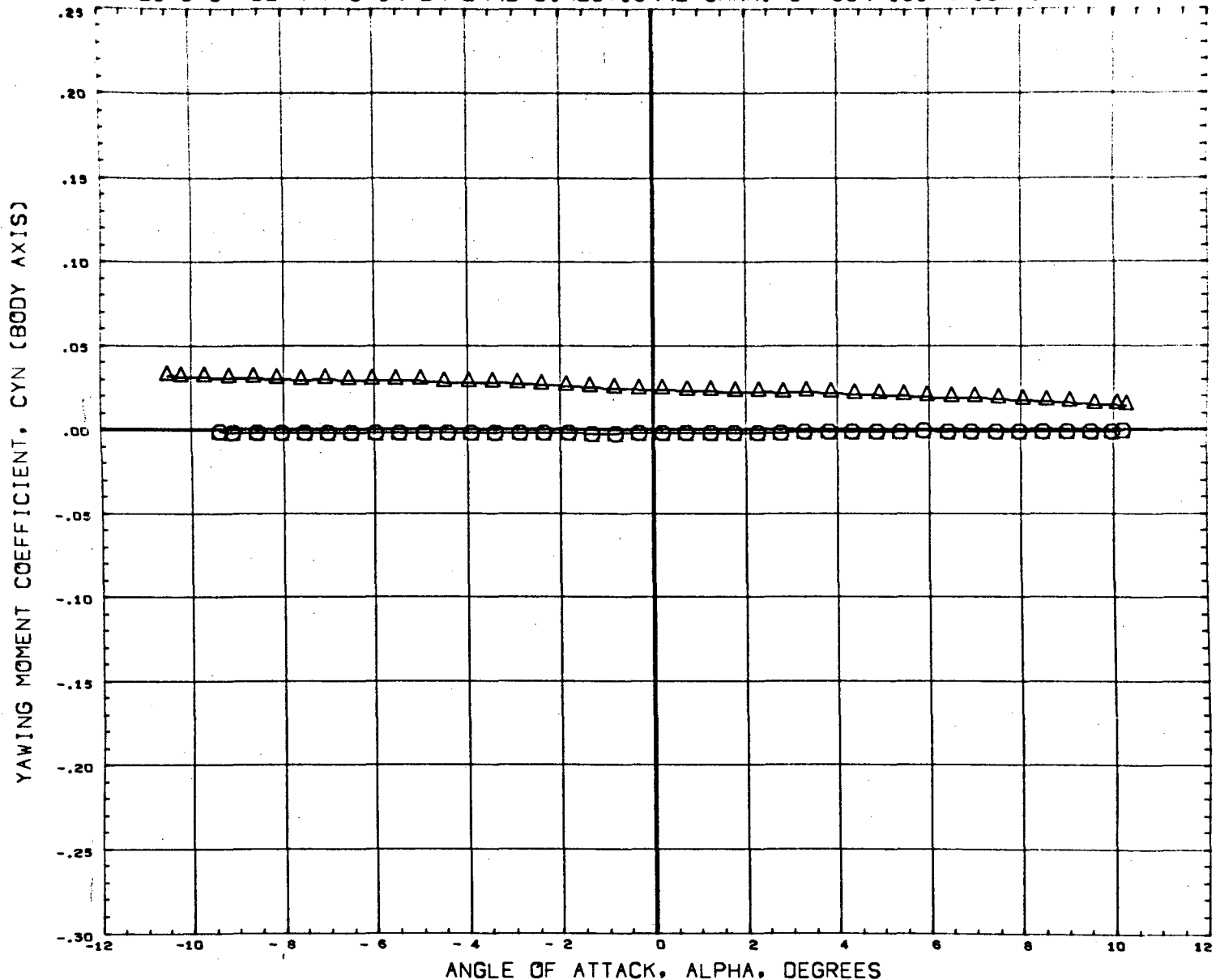
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.9004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

2.20

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T1

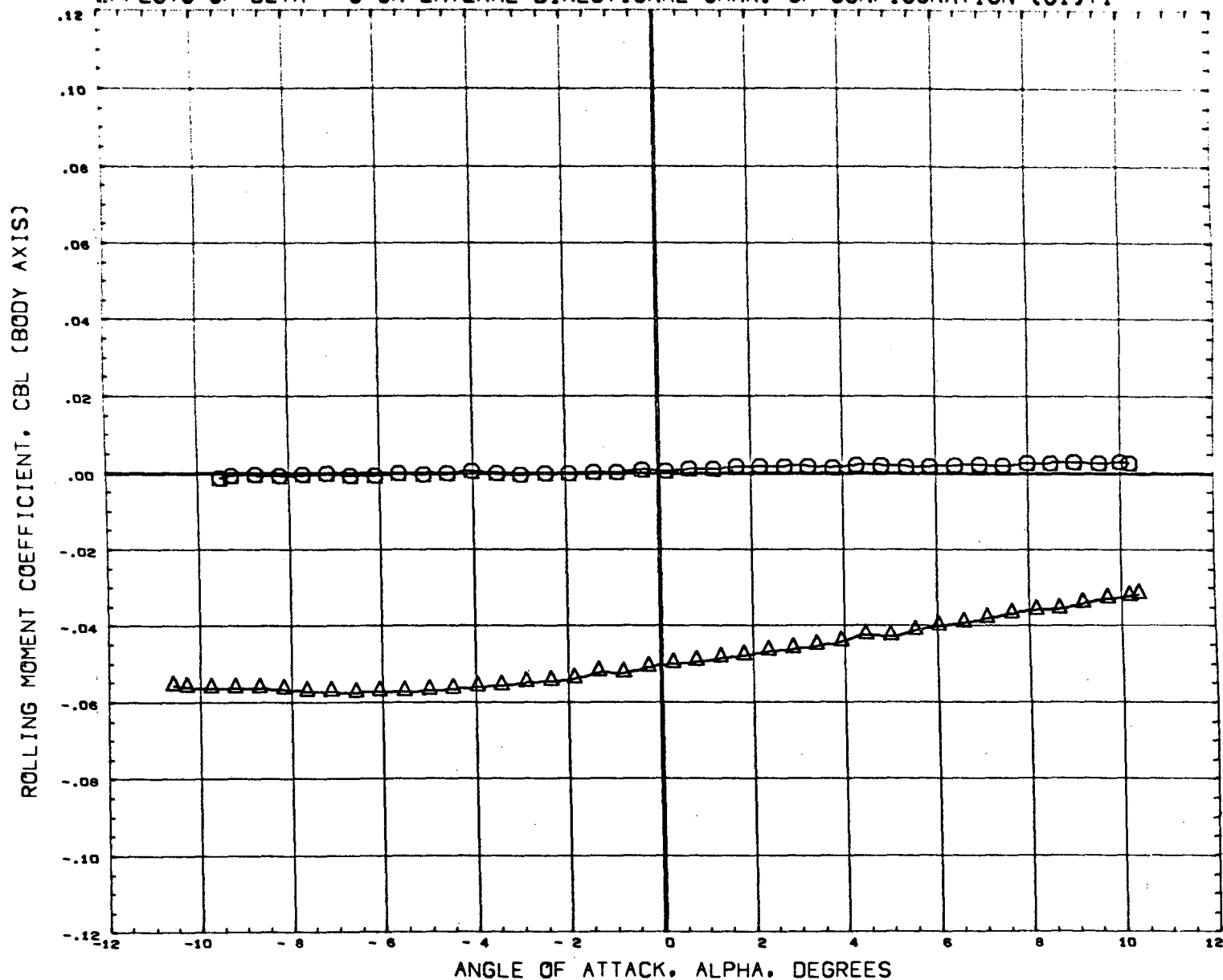


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7447)	MDAC S-222 COMPOSITE (T-CG) (01)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7449)	MDAC S-222 COMPOSITE (T-CG) (01)T1	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T1



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (RD7447) (01)T1  
 (RD7449) (01)T1

BETA ELEVTR AILRON RUDDER  
 0.000 0.000 0.000 0.000  
 6.000 0.000 0.000 0.000

REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

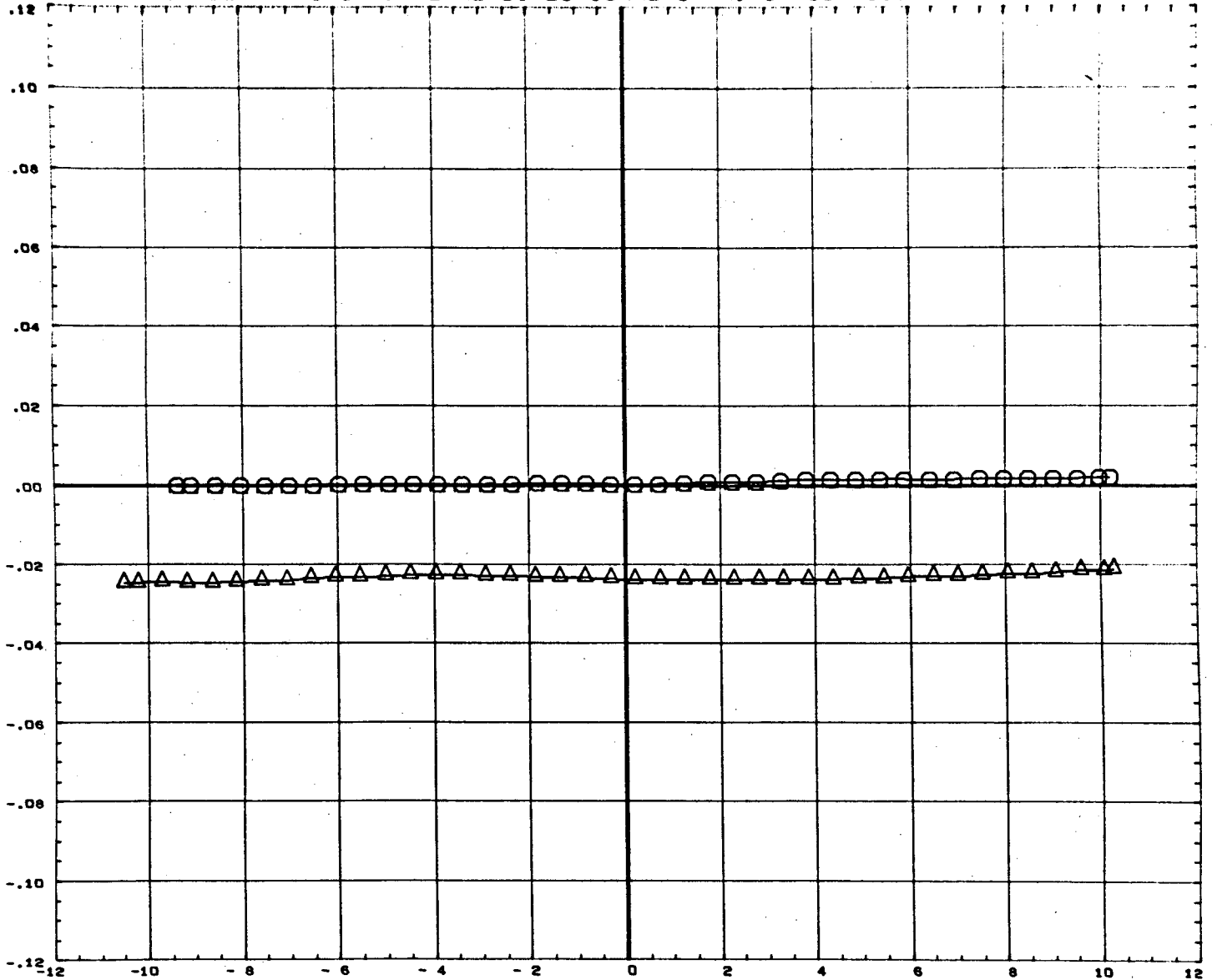
MACH 2.20

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T1

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7447) Q MDAC S-222 COMPOSITE (T-CG) (01)T1  
 (RD7449) A MDAC S-222 COMPOSITE (T-CG) (01)T1

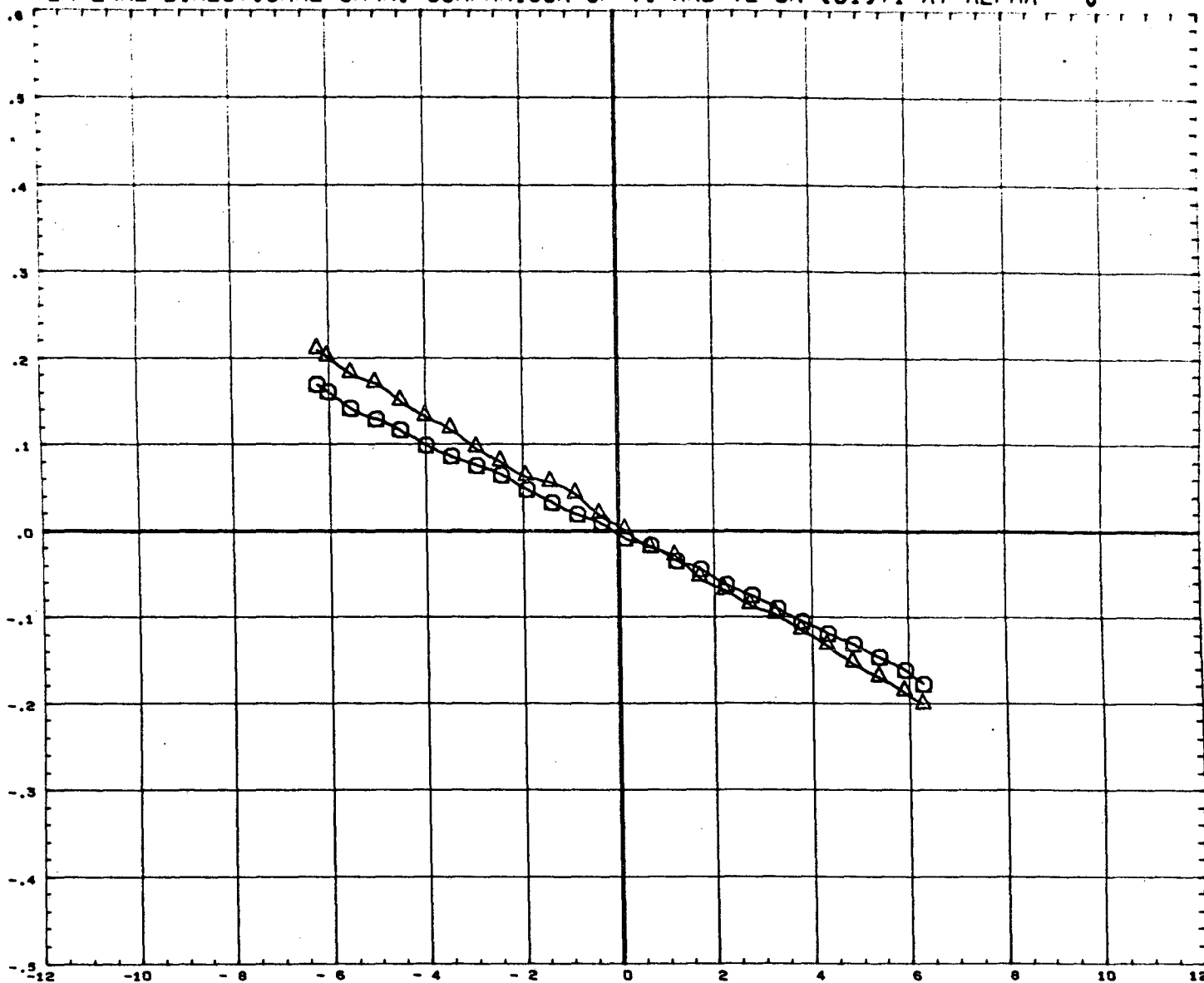
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 4.47

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

LATERAL FORCE COEFFICIENT, CY



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442) ○ MDAC S-222 COMPOSITE(T-CG) (01V1)T1  
(ED7448) Δ MDAC S-222 COMPOSITE(T-CG) (01)T1

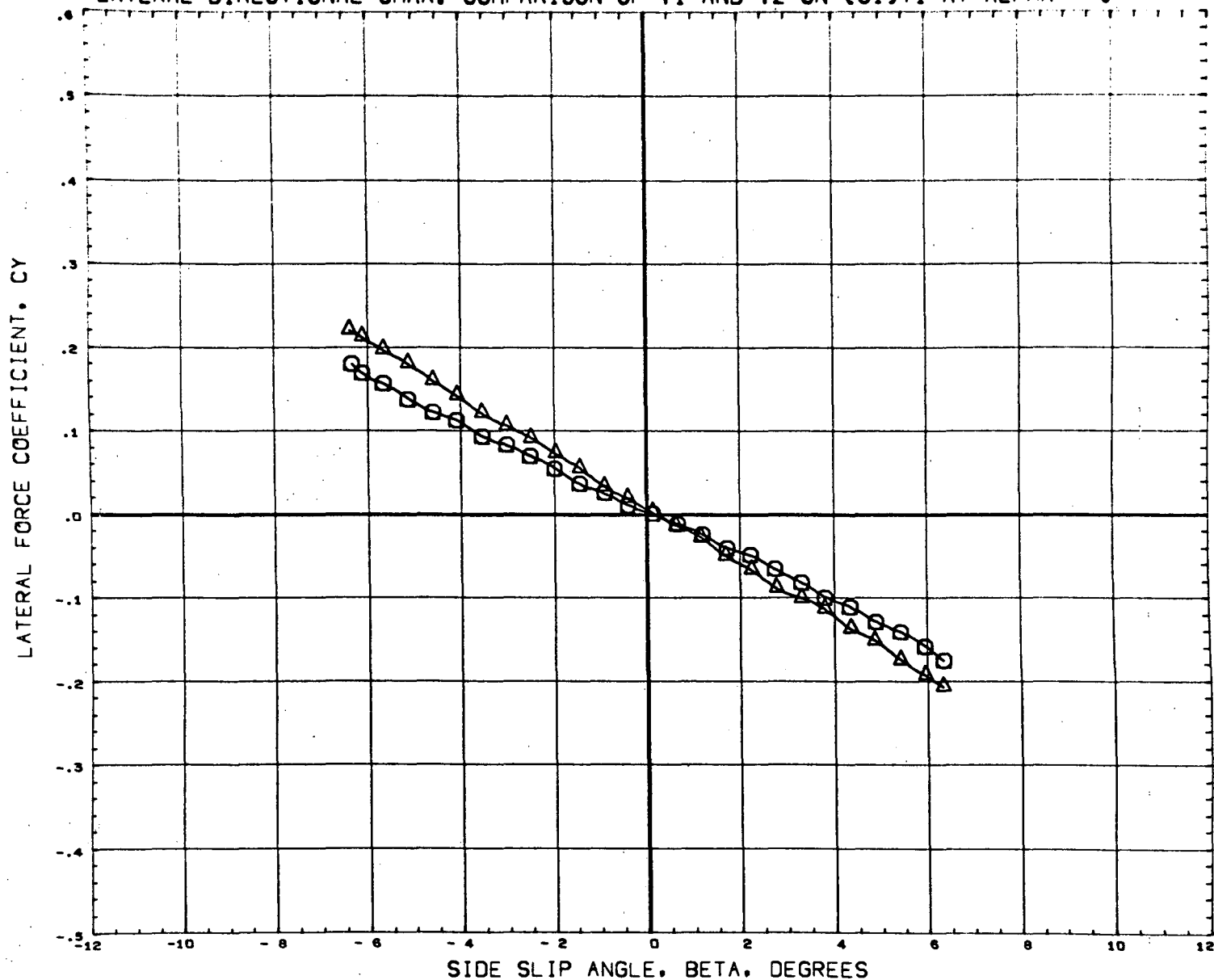
ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
YMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .60

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



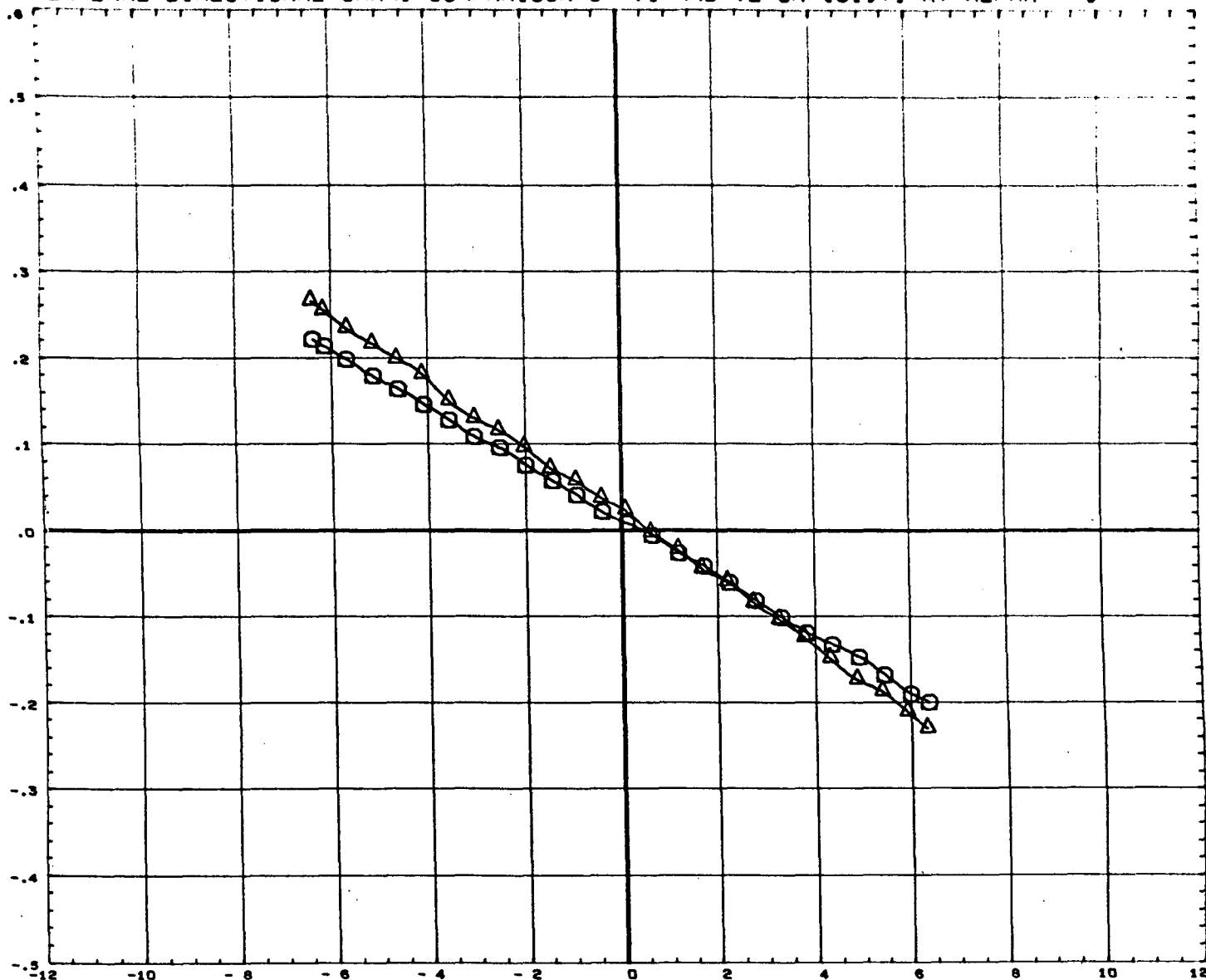
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(ED7448)	MDAC S-222 COMPOSITE (T-CG) (01) T1	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH .90

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

LATERAL FORCE COEFFICIENT, CY



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442) ○ MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
(ED7448) Δ MDAC S-222 COMPOSITE (T-CG) (01)T1

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

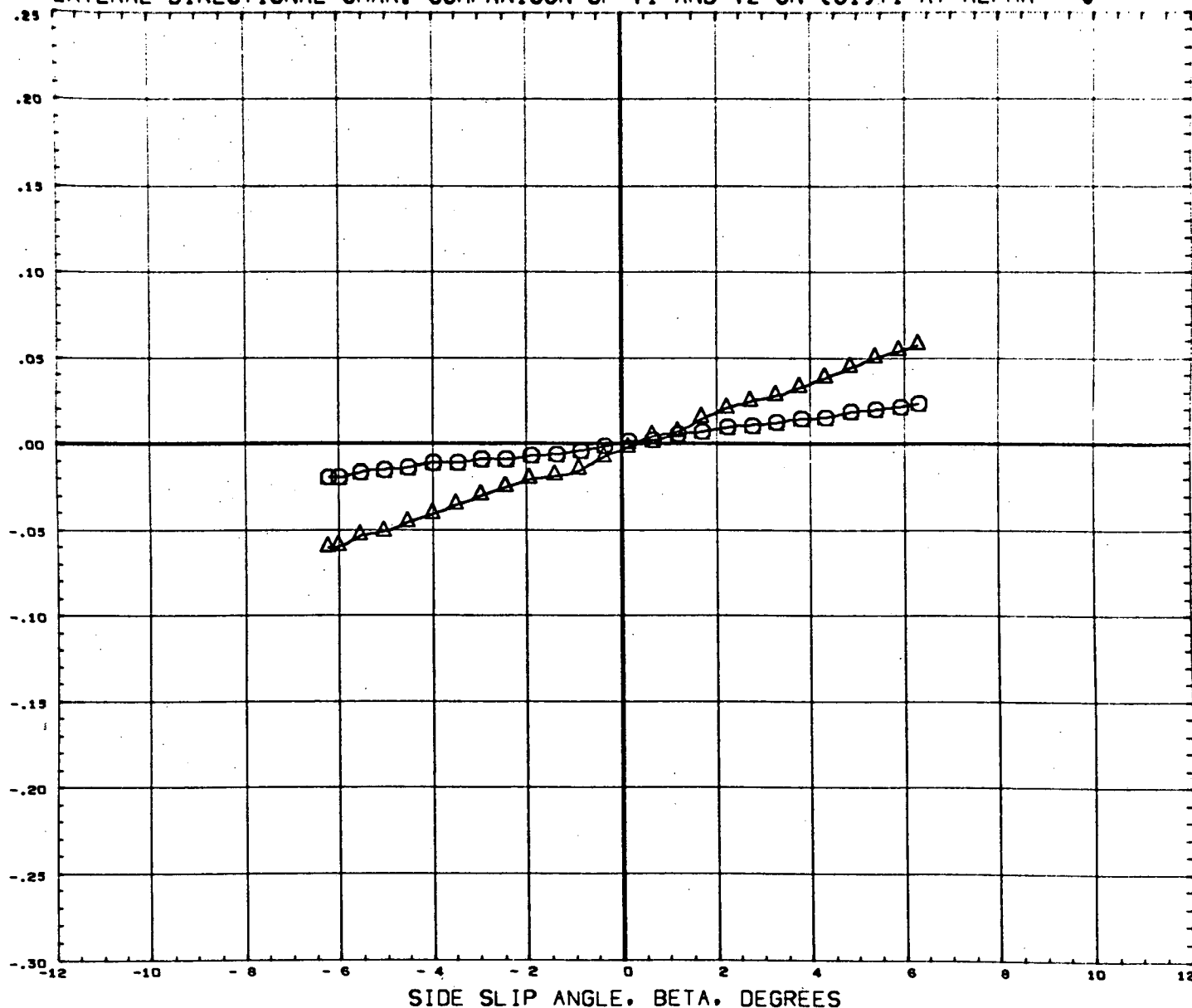
MACH

1.10

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



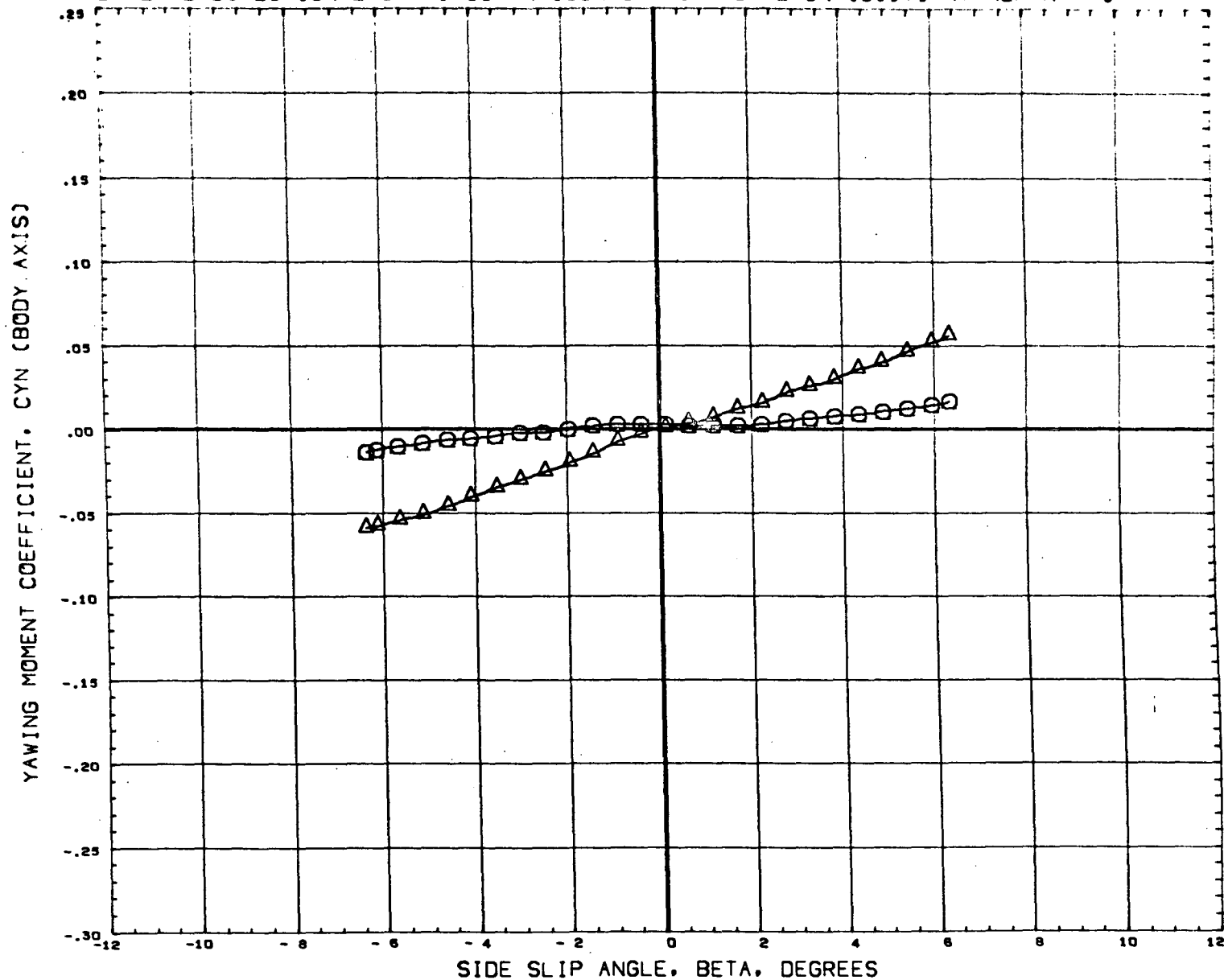
DATA SET SYMBOL      CONFIGURATION DESCRIPTION  
 (RD7442)      MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
 (ED7448)      MDAC S-222 COMPOSITE (T-CG) (01) T1

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060



MACH .60

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(R07442)  MDAC S-222 COMPOSITE(T-CG) (01V1)T1  
 (E07448)  MDAC S-222 COMPOSITE(T-CG) (01)T1

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

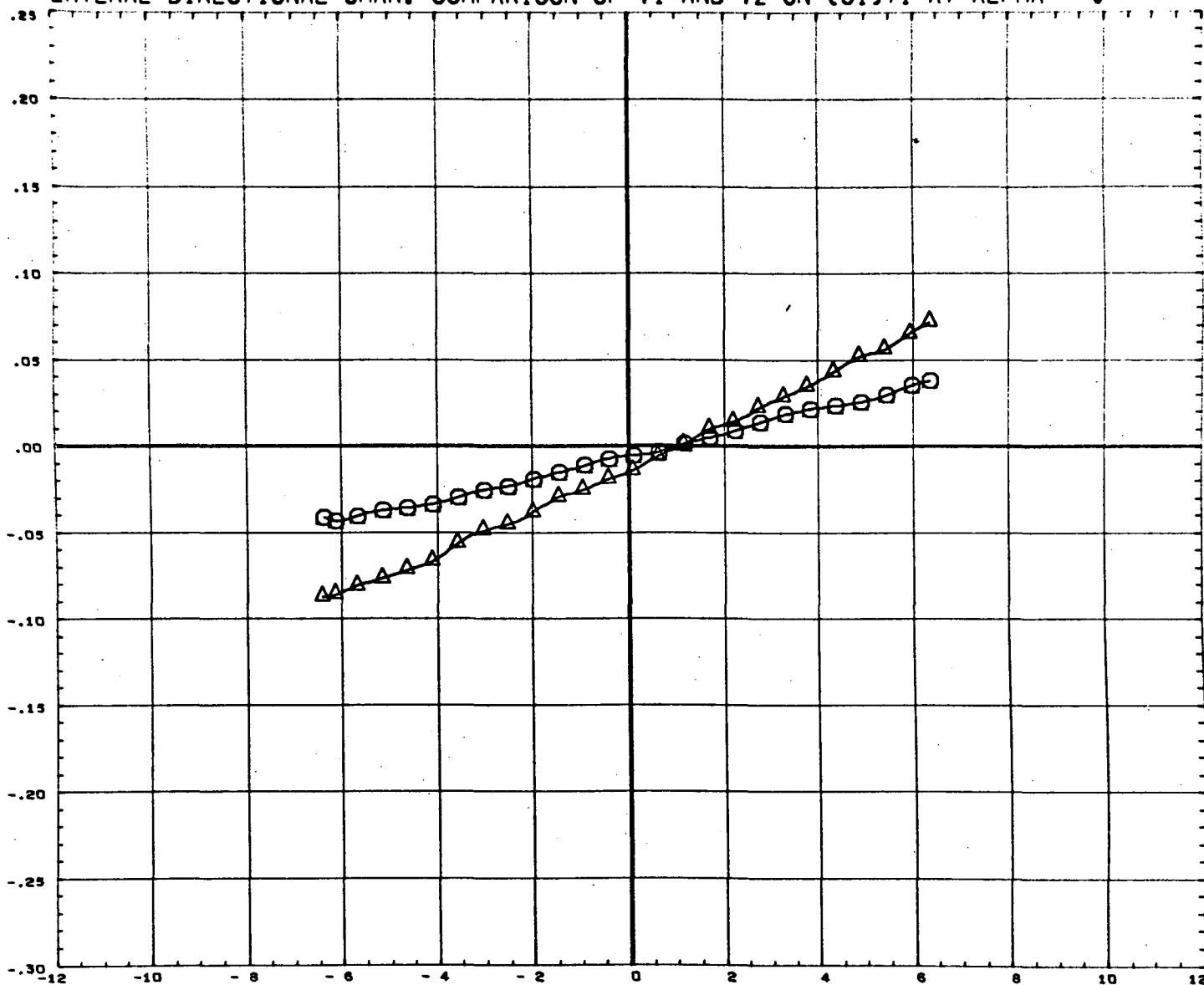
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .90

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
(RD7442) (RD7448) MDAC S-222 COMPOSITE (T-C6) (01V1)T1  
MDAC S-222 COMPOSITE (T-C6) (01)T1

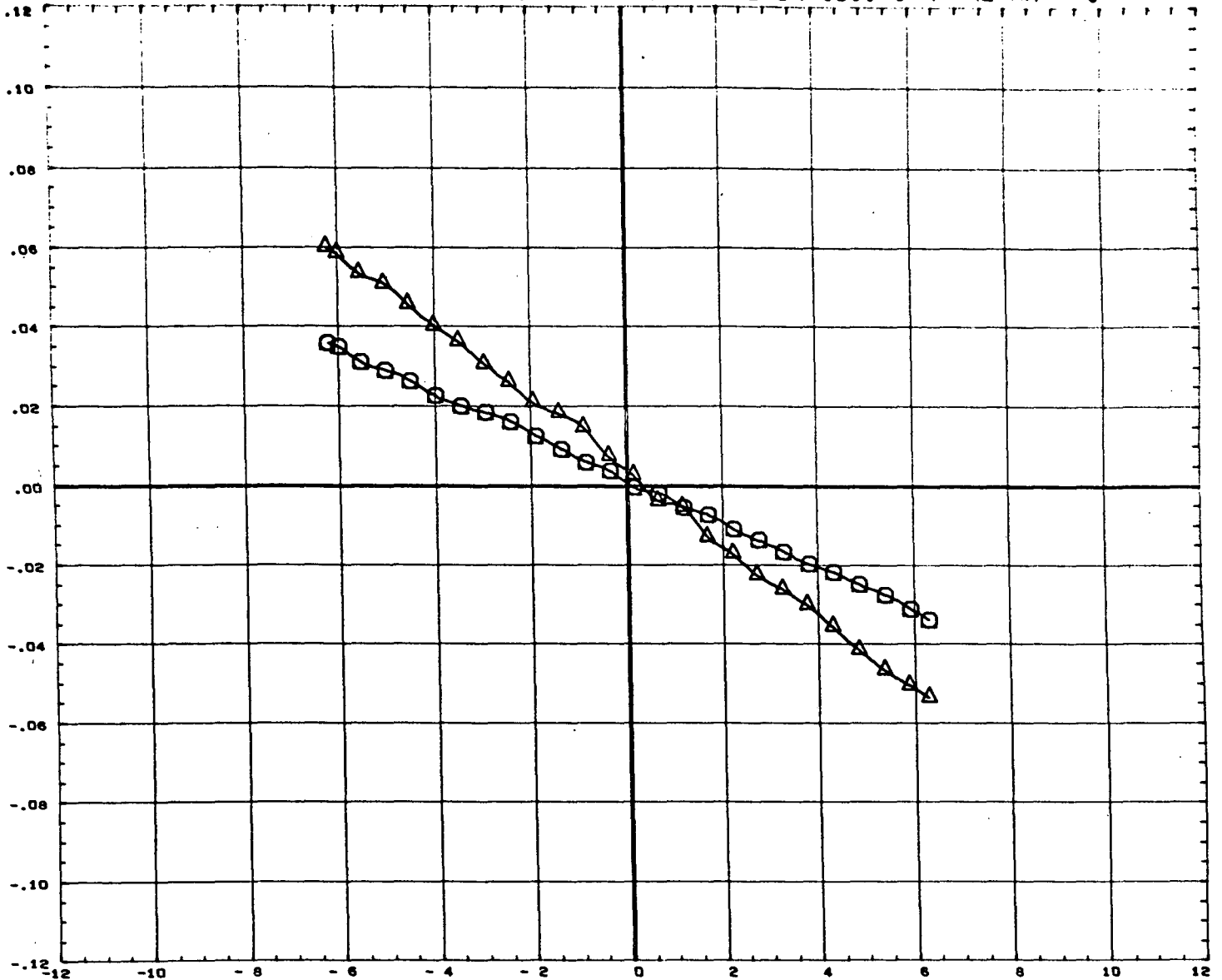
ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION
0.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF 609.5004 IN.
				BREF 882.0004 IN.
				XMRP 557.0004 IN.
				YMRP 0.0000 IN.
				ZMRP 200.0004 IN.
				SCALE 0.0060

MACH 1.10

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1
(ED7448)	MDAC S-222 COMPOSITE (T-CG) (01)T1

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

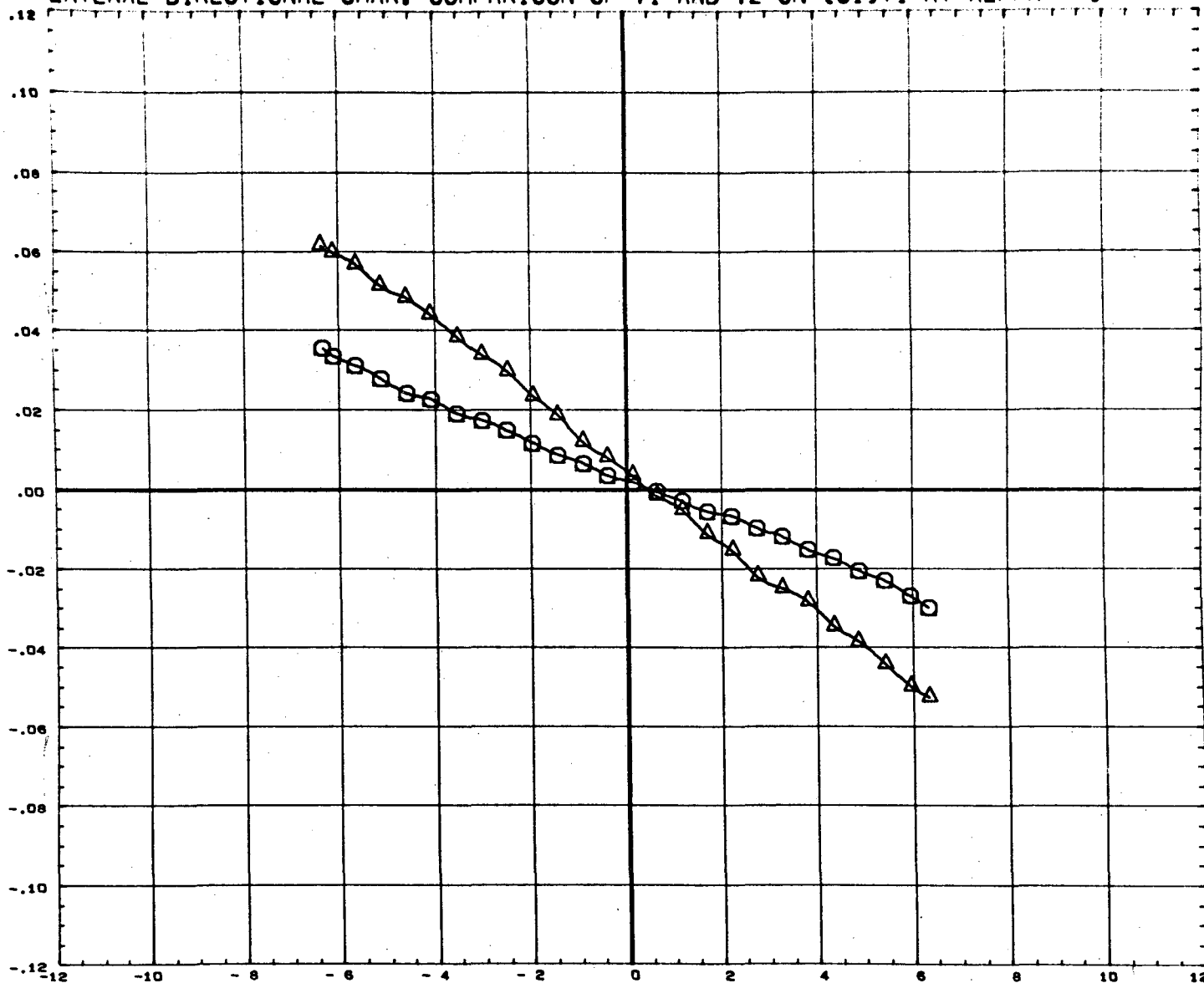
MACH .60

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442) (RD7448) MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
MDAC S-222 COMPOSITE (T-CG) (01)T1

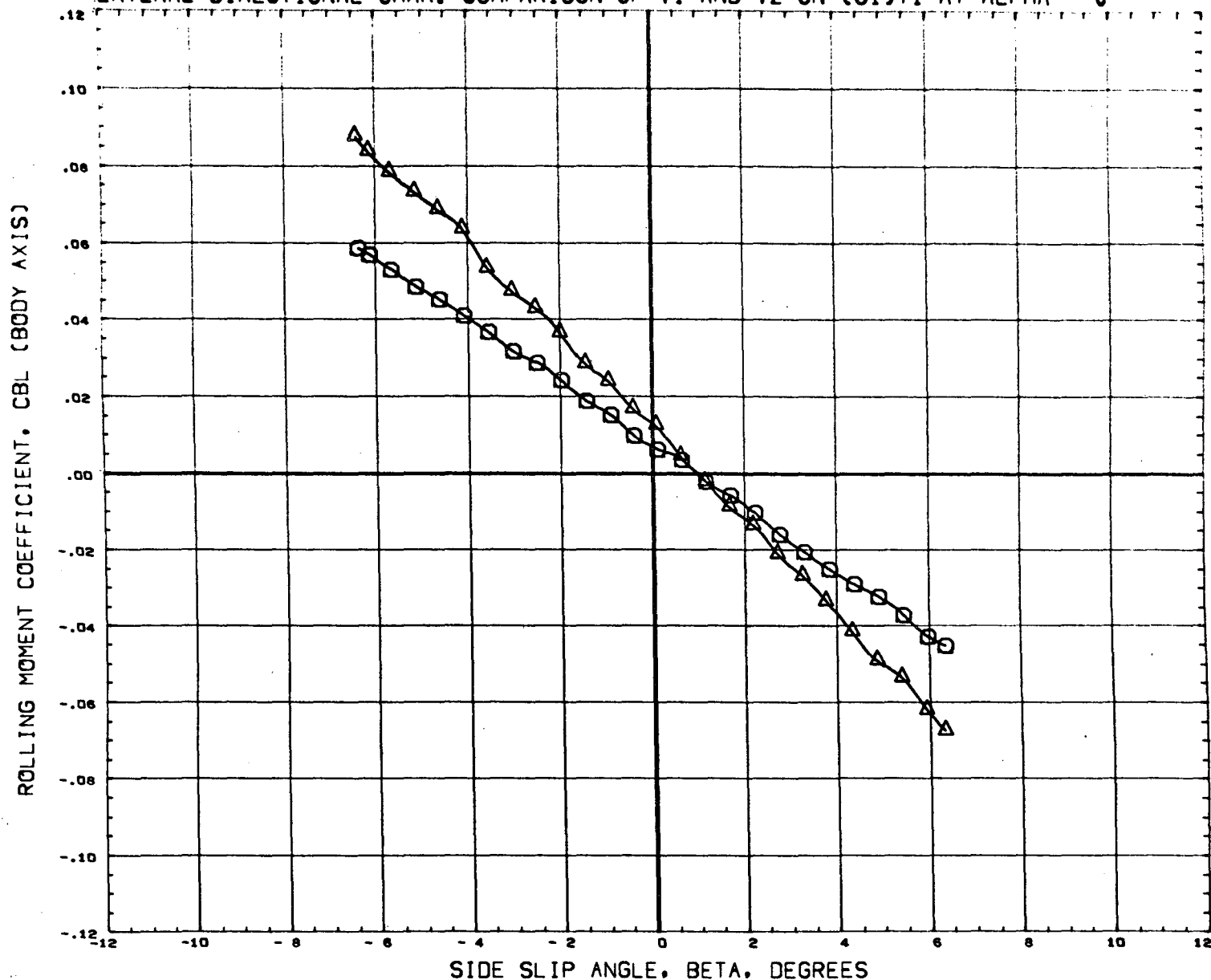
ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

MACH .90

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# LATERAL-DIRECTIONAL CHAR. COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

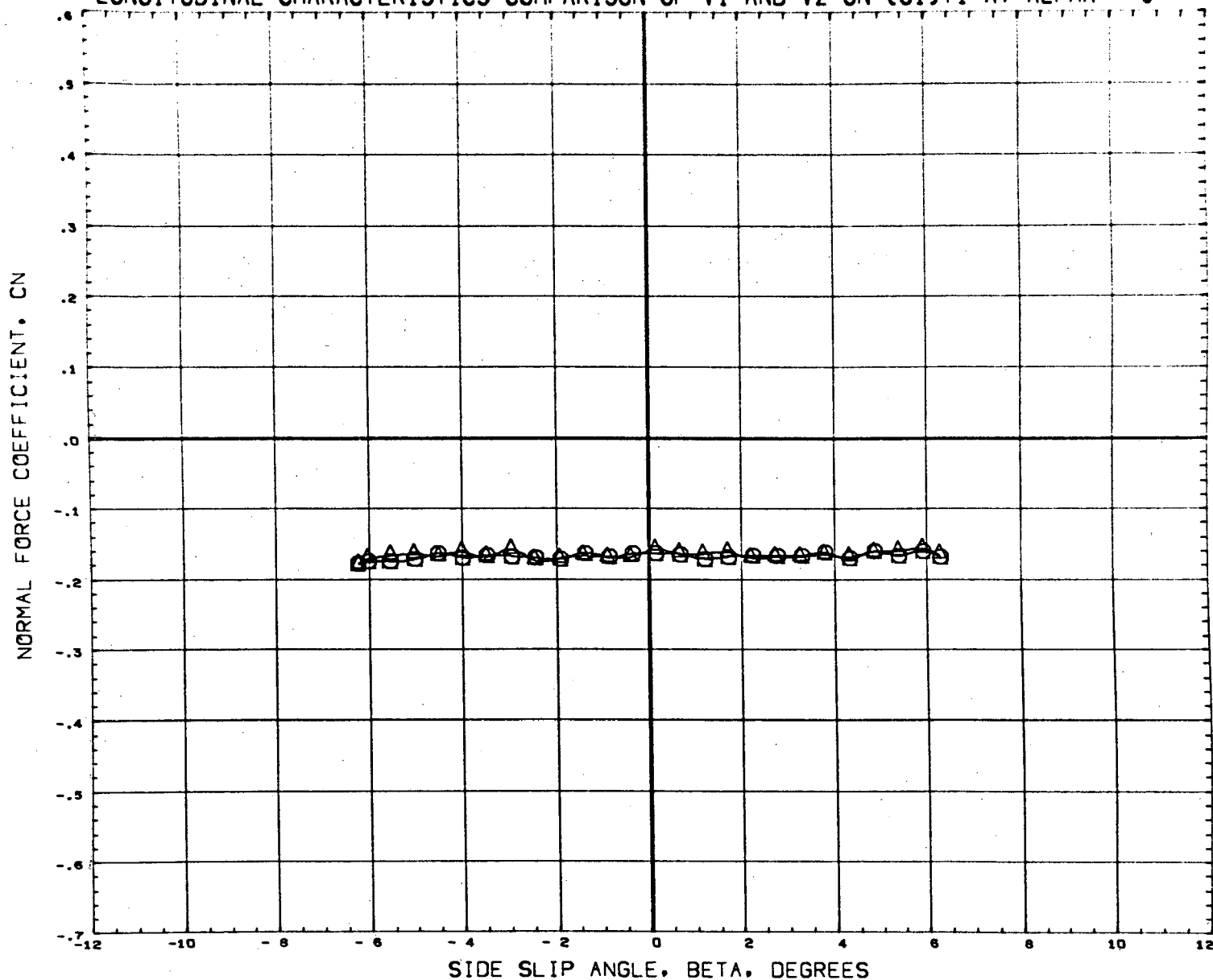


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(R07442)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(E07448)	MDAC S-222 COMPOSITE (T-CG) (01) T1	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060


MACH 1.10


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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7442)  MDAC S-222 COMPOSITE (T-CG) (01V1)T1

(DD7448)  MDAC S-222 COMPOSITE (T-CG) (01)T1

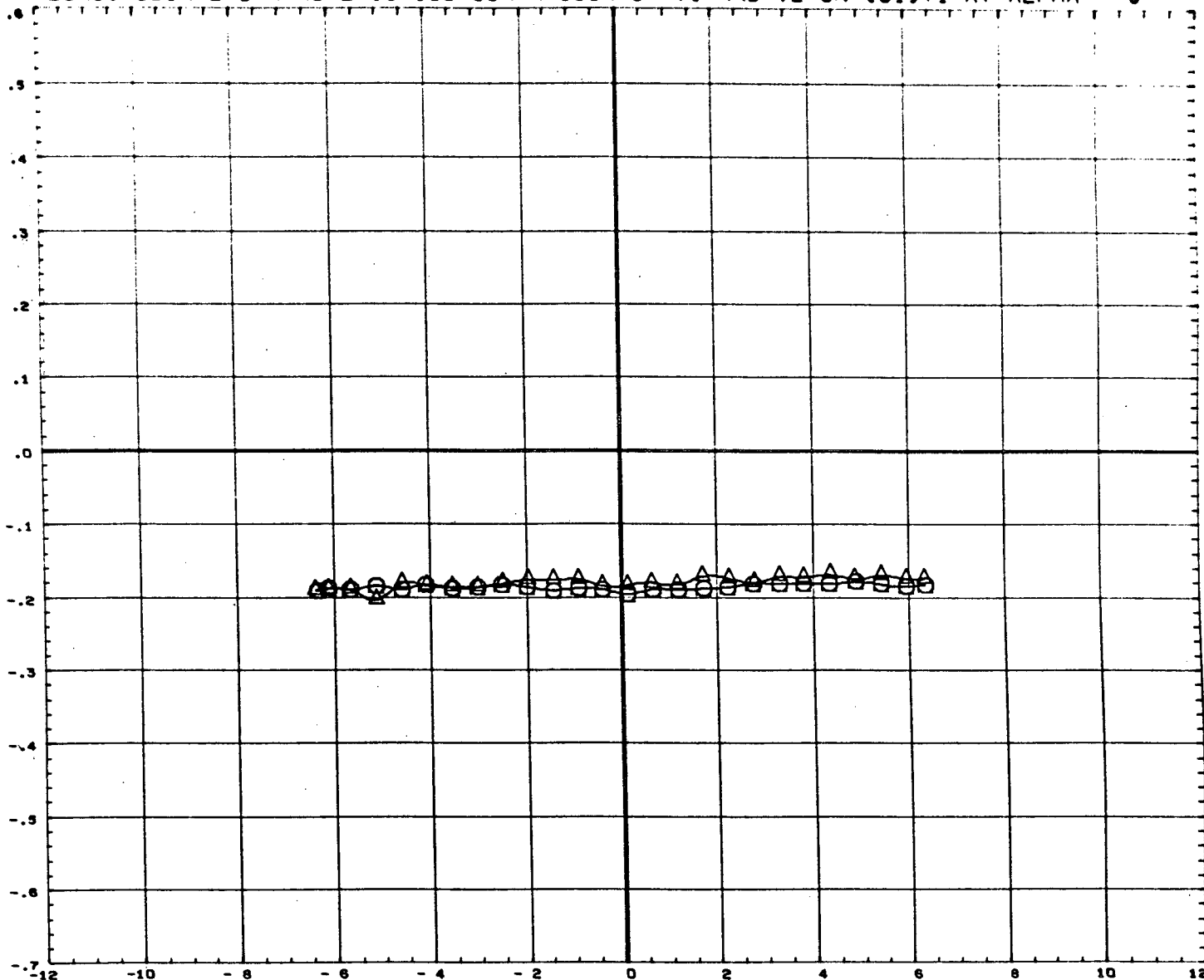
ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .60

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

NORMAL FORCE COEFFICIENT, CN



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
 (CD7442)    MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
 (DD7448)    MDAC S-222 COMPOSITE (T-CG) (01) T1

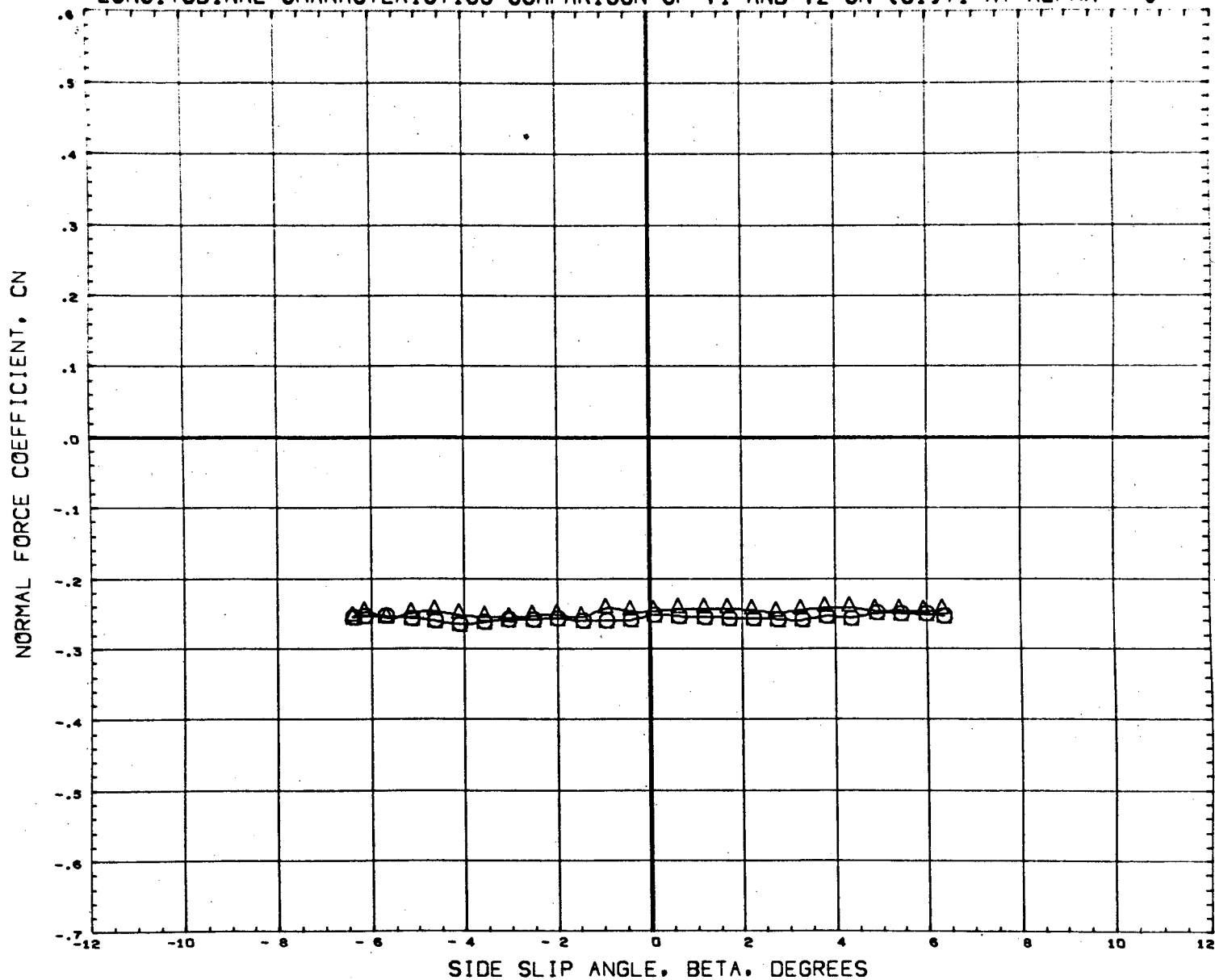
ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

.90

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

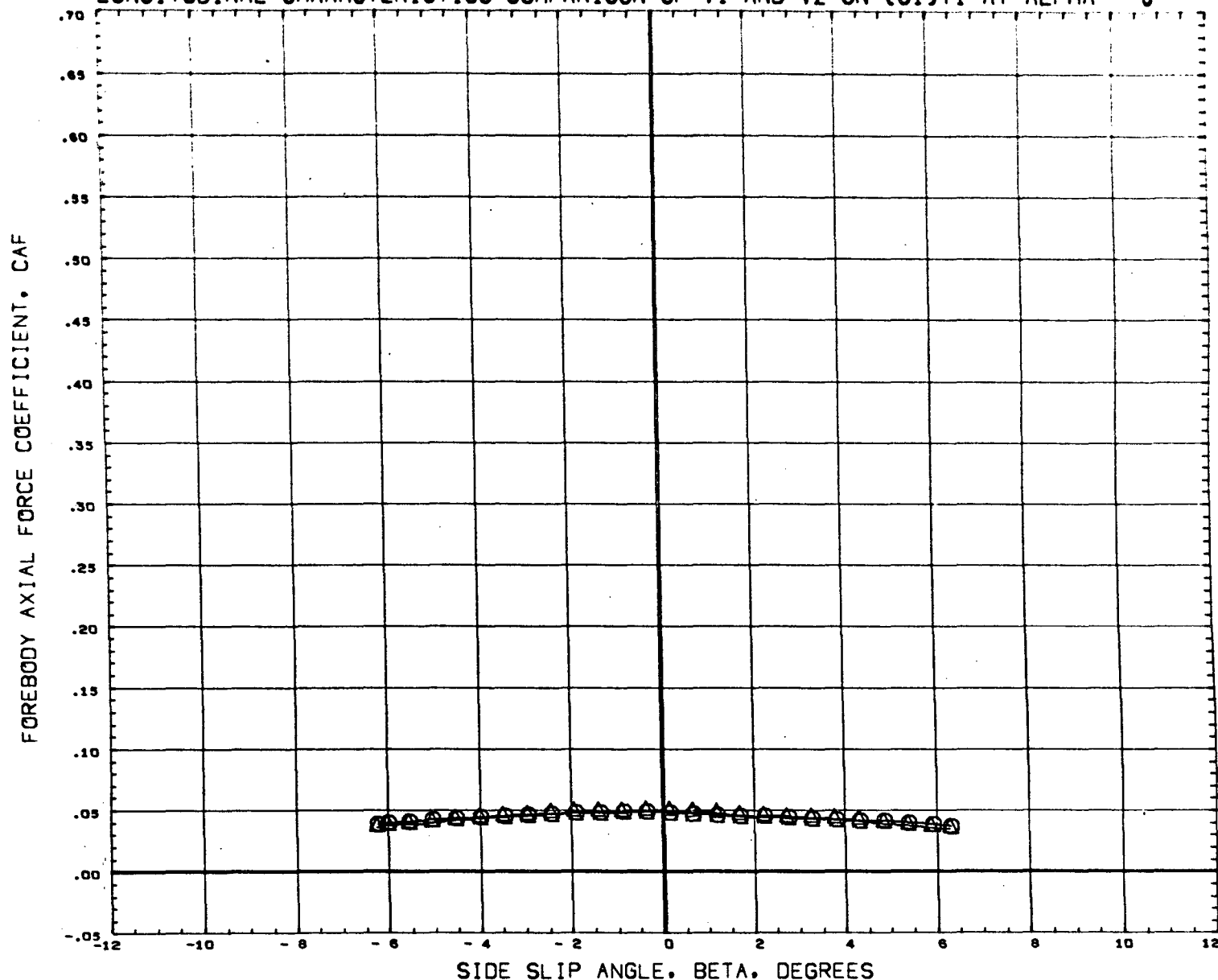


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(DD7448)	MDAC S-222 COMPOSITE (T-CG) (01) T1	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.10

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
 (CD7442)    MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
 (DD7448)    MDAC S-222 COMPOSITE (T-CG) (01)T1

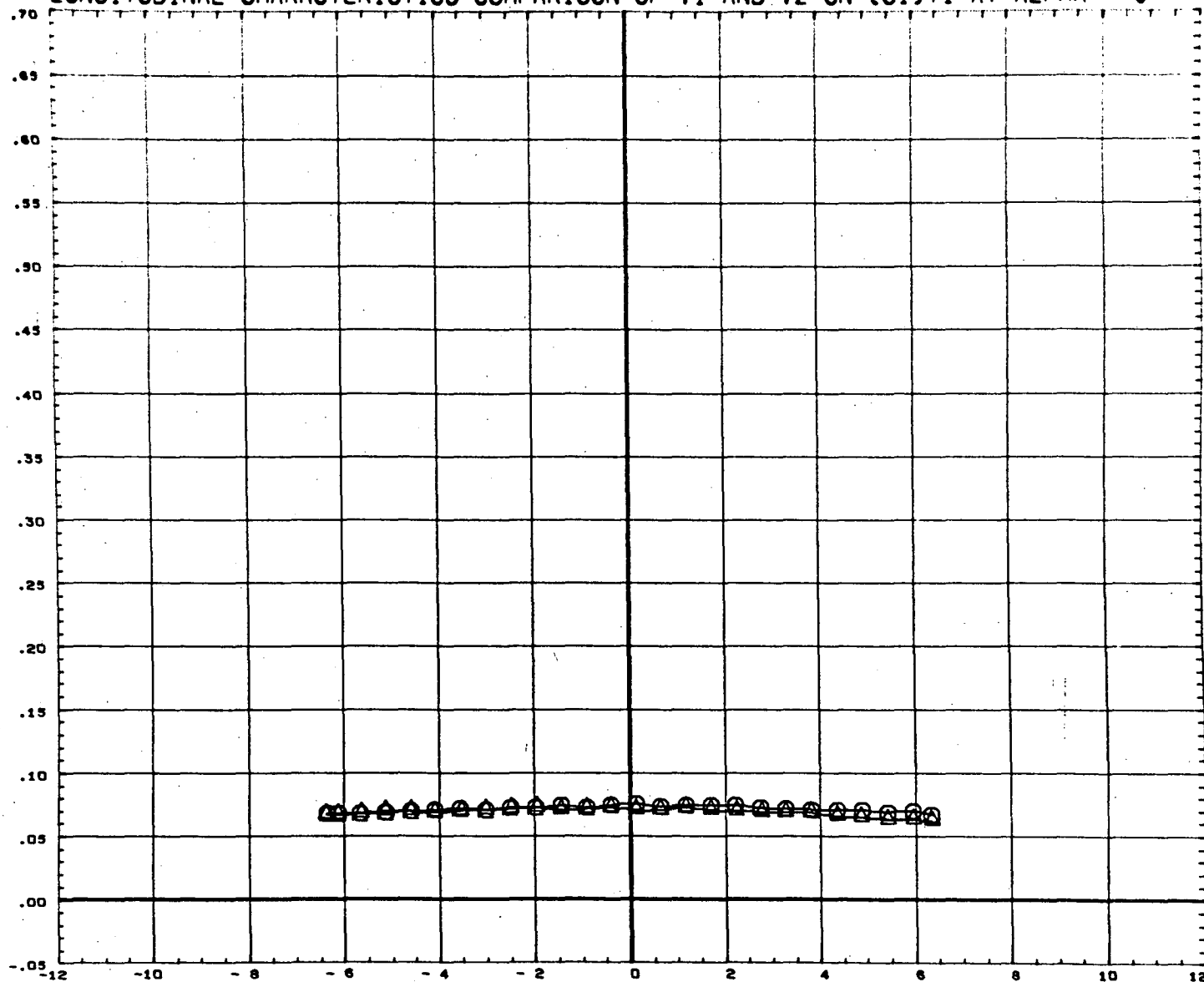
ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .60

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



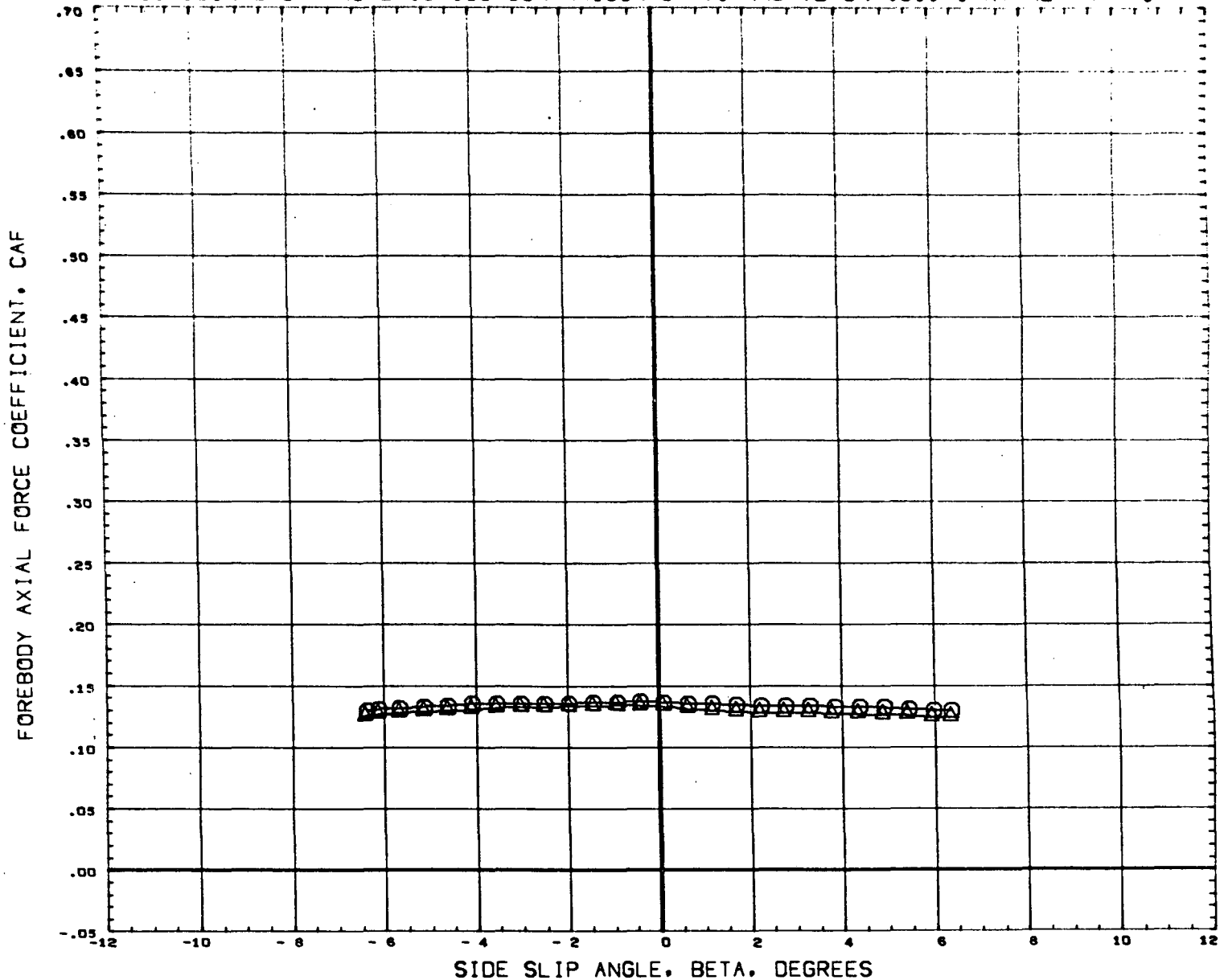
SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7442)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(DD7448)	MDAC S-222 COMPOSITE(T-CG) (01)T1	0.000	0.000	0.000	0.000	LREF	609.3004 IN.
						BREF	882.0004 IN.
						XMRP	537.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH .90

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7442) MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
 (DD7448) MDAC S-222 COMPOSITE (T-CG) (01) T1

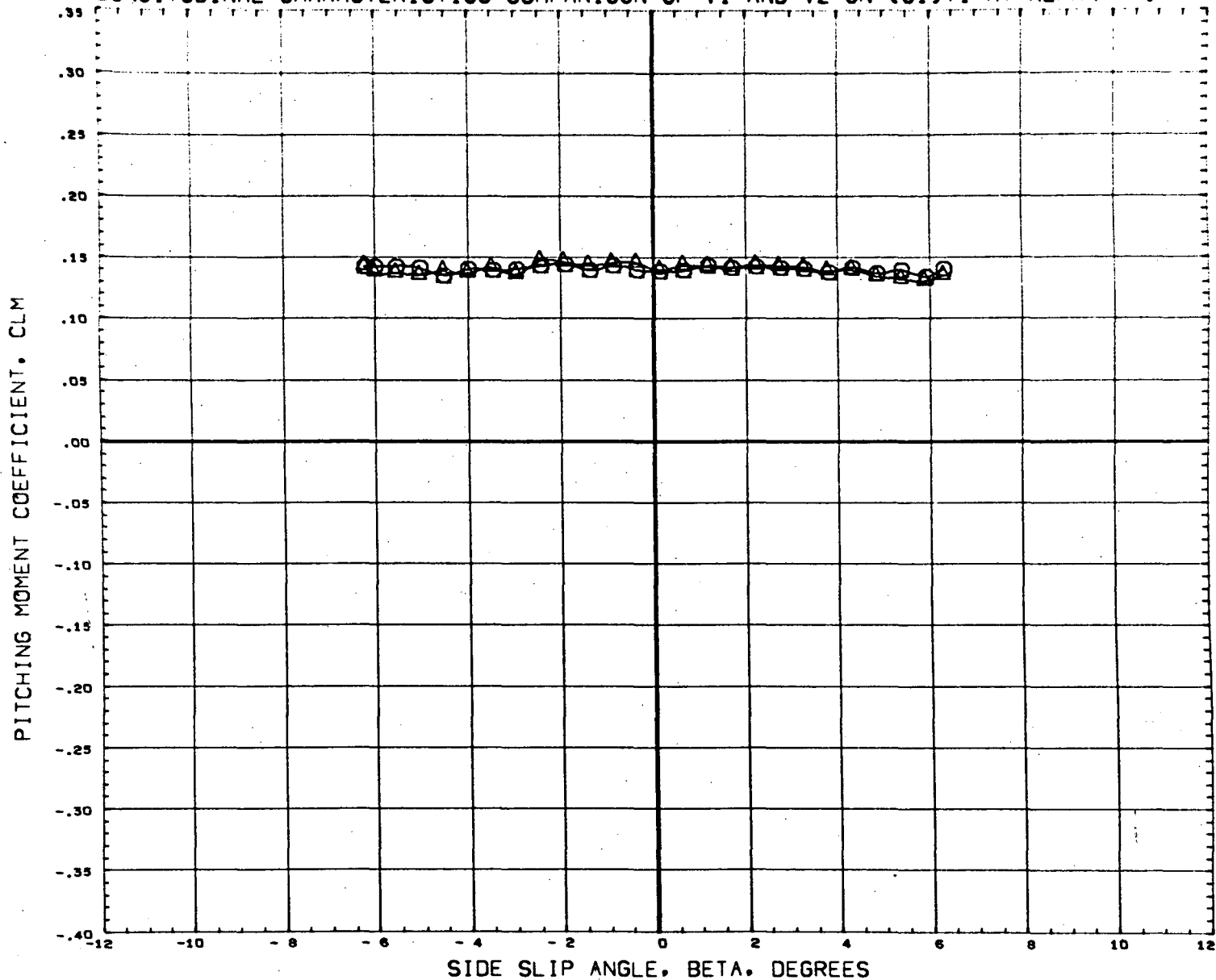
ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 1.10

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0

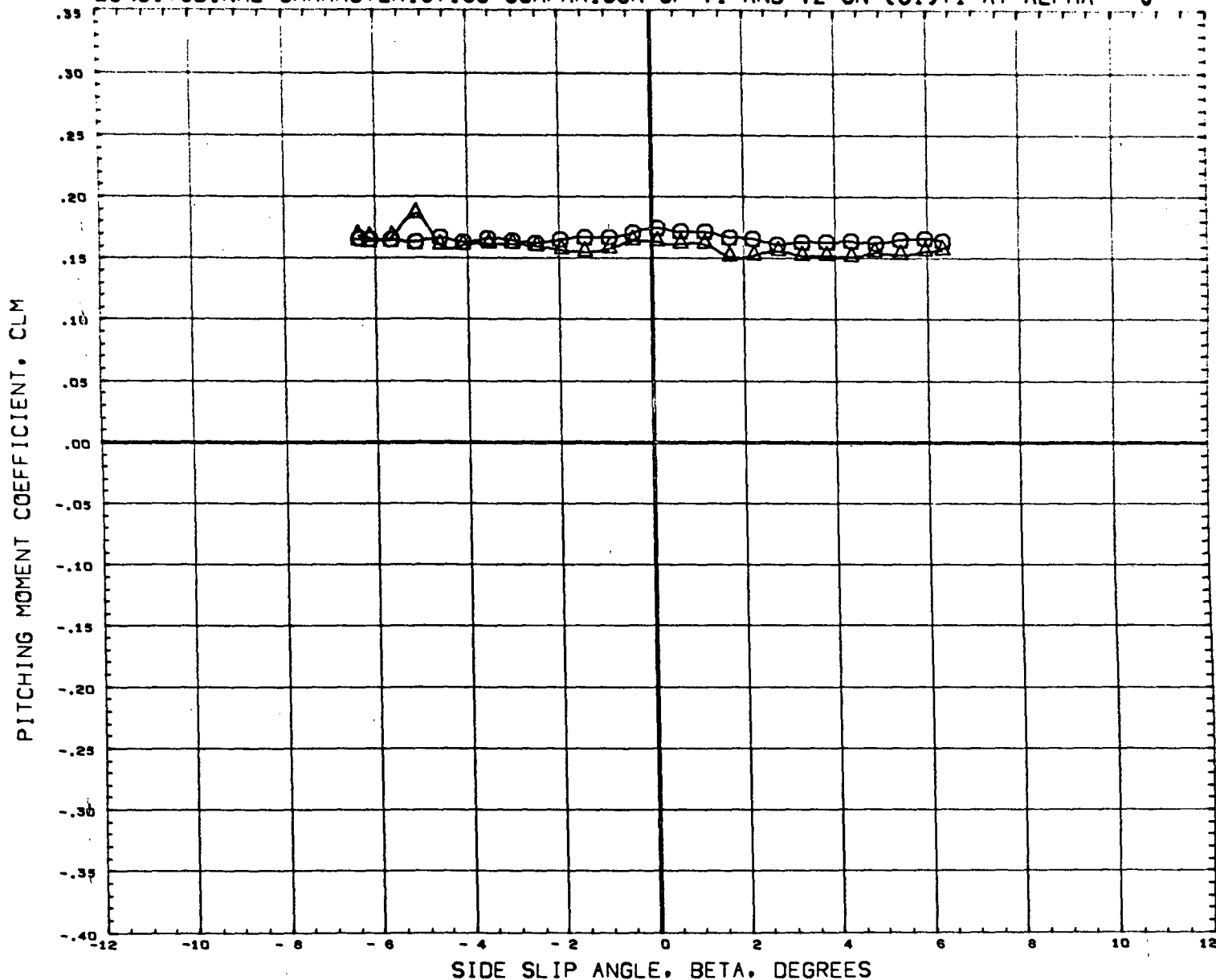


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(CD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1	0.000	0.000	0.000	0.000	SREF	3155.3040	SO.FT.
(DD7448)	MDAC S-222 COMPOSITE (T-CG) (01) T1	0.000	0.000	0.000	0.000	LREF	609.5004	IN.
						BREF	882.0004	IN.
						XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH .60

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7442) MDAC S-222 COMPOSITE (T-CG) (01V1) T1

(DD7448) MDAC S-222 COMPOSITE (T-CG) (01) T1

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

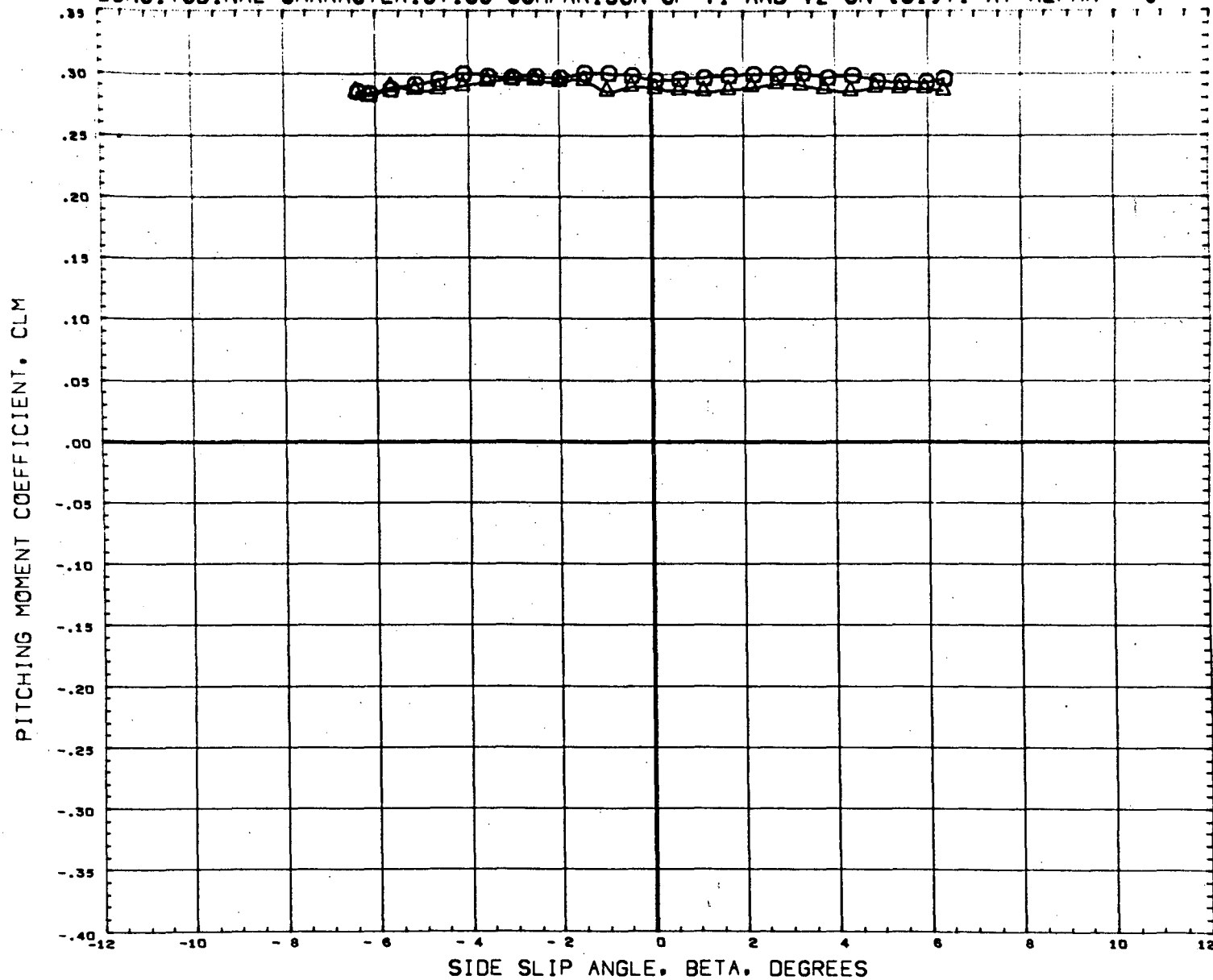
REFERENCE INFORMATION

SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .90

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



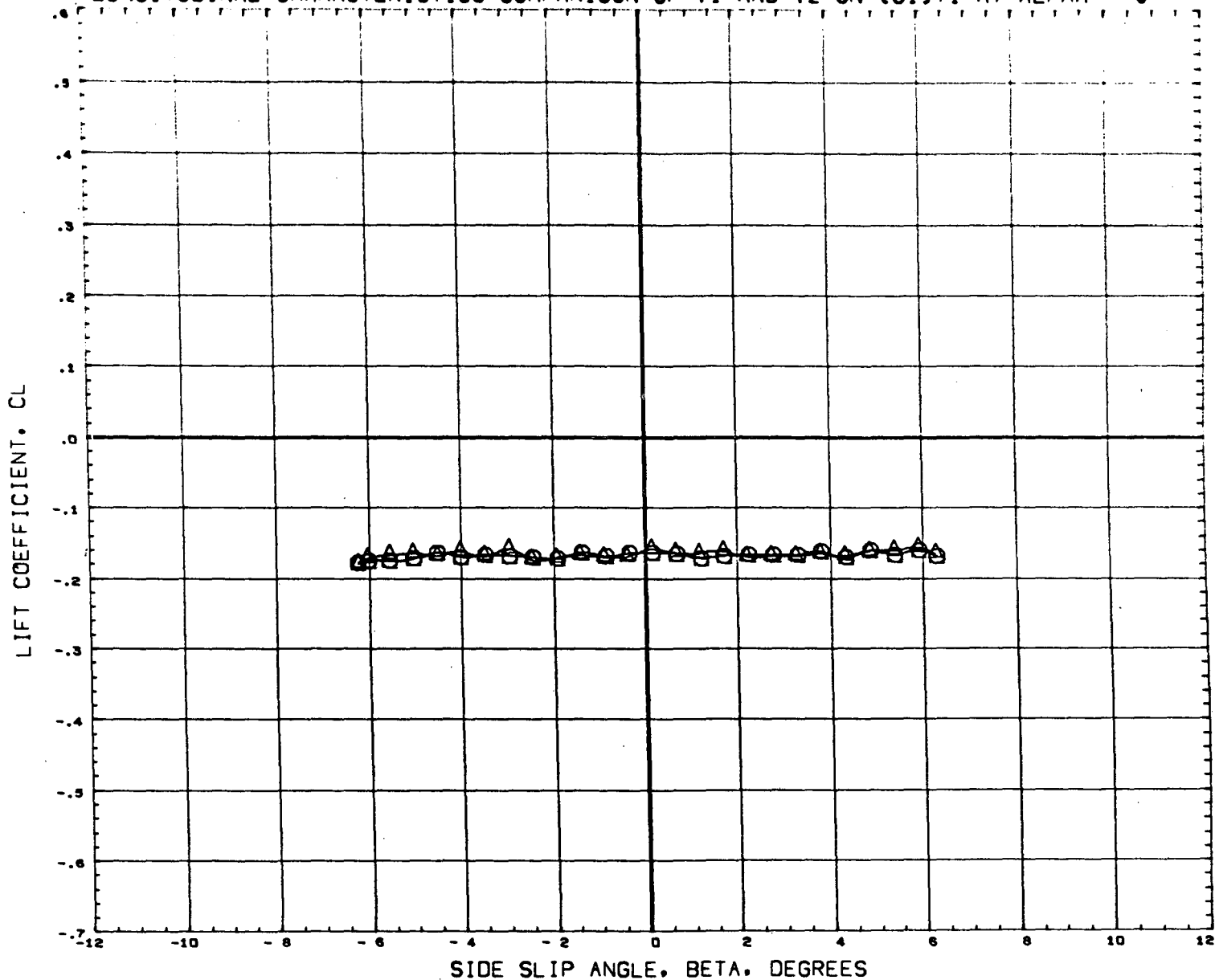
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7442) MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
 (DD7448) MDAC S-222 COMPOSITE (T-CG) (01) T1

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 1.10

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



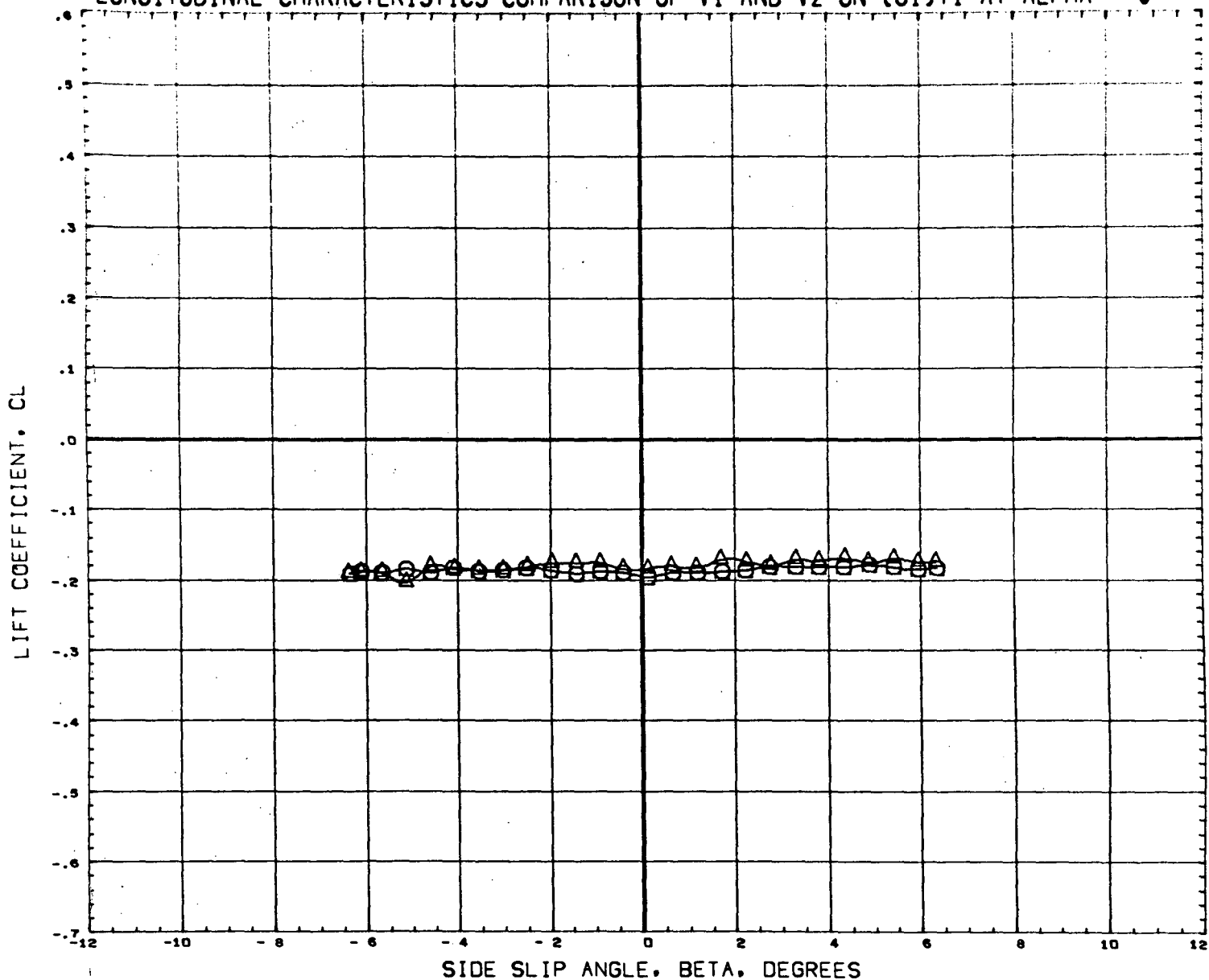
DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
 (CD7442)    Q    MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
 (DD7448)    A    MDAC S-222 COMPOSITE (T-CG) (01) T1

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .60

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



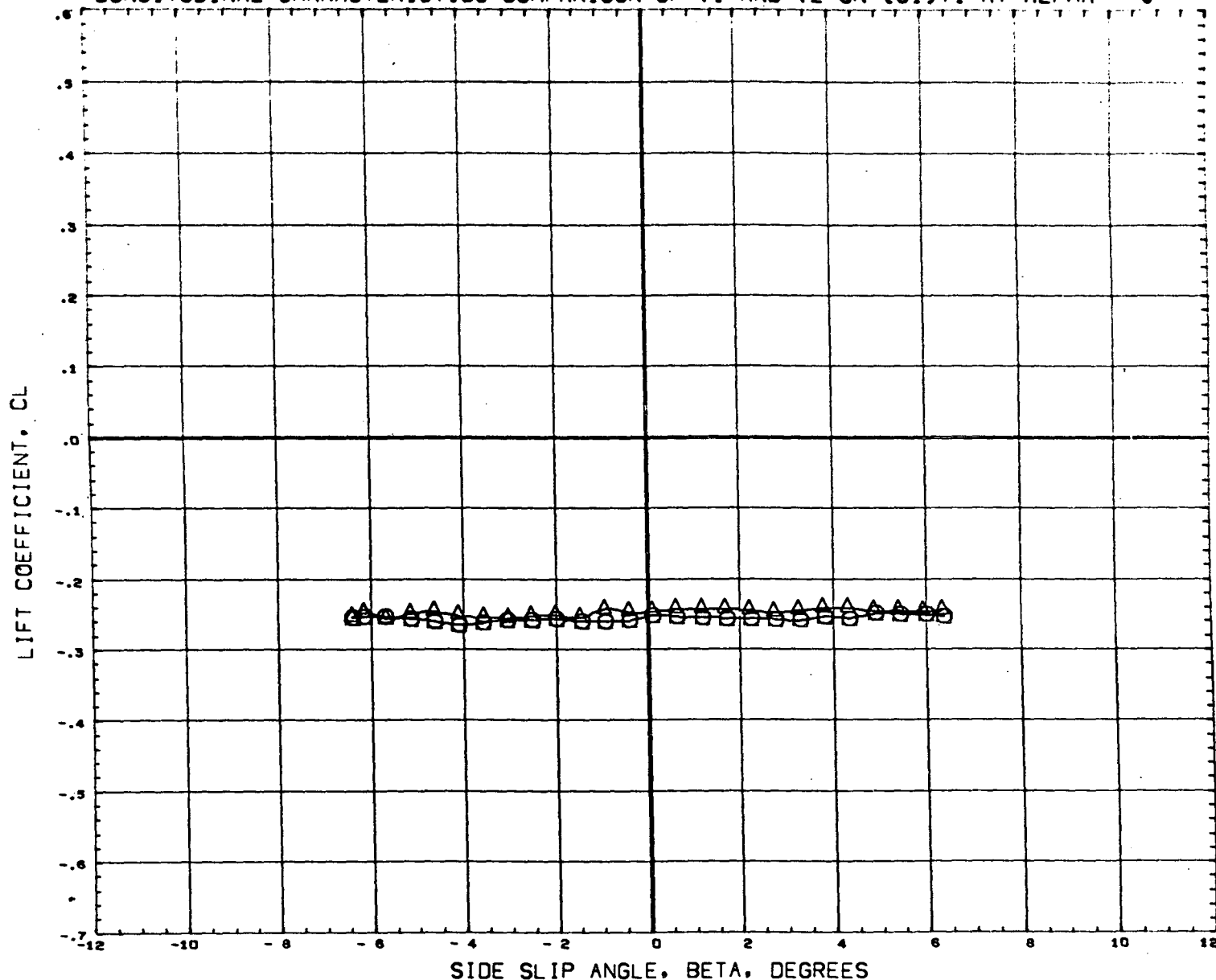
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (C07442) MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
 (D07448) MDAC S-222 COMPOSITE (T-CG) (01) T1

ALPHA	ELEVTR	ATLON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .90

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1
(DD7448)	MDAC S-222 COMPOSITE (T-CG) (01) T1

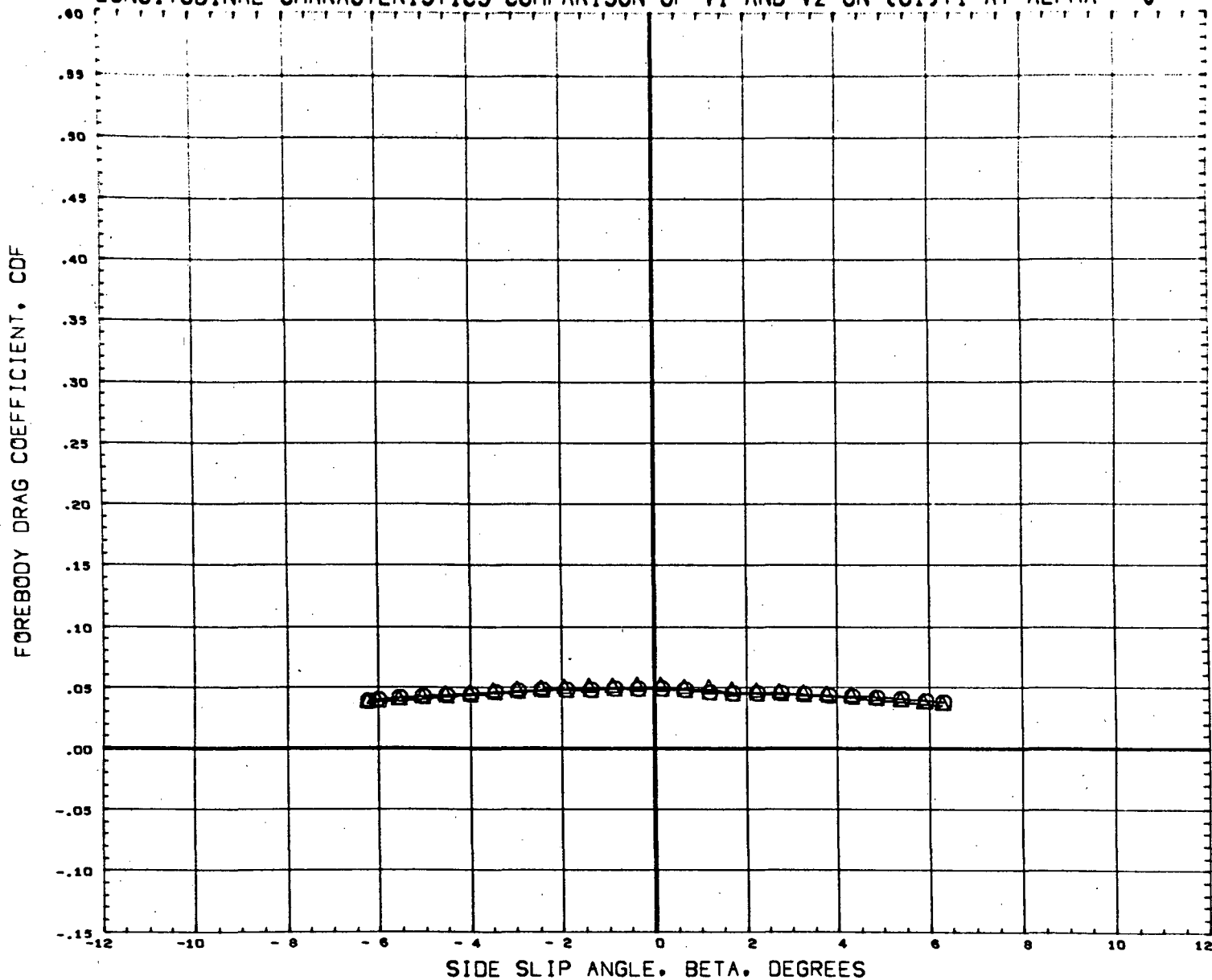
ALPHA	ELEVTR	ATLON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SO.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

MACH 1.10

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

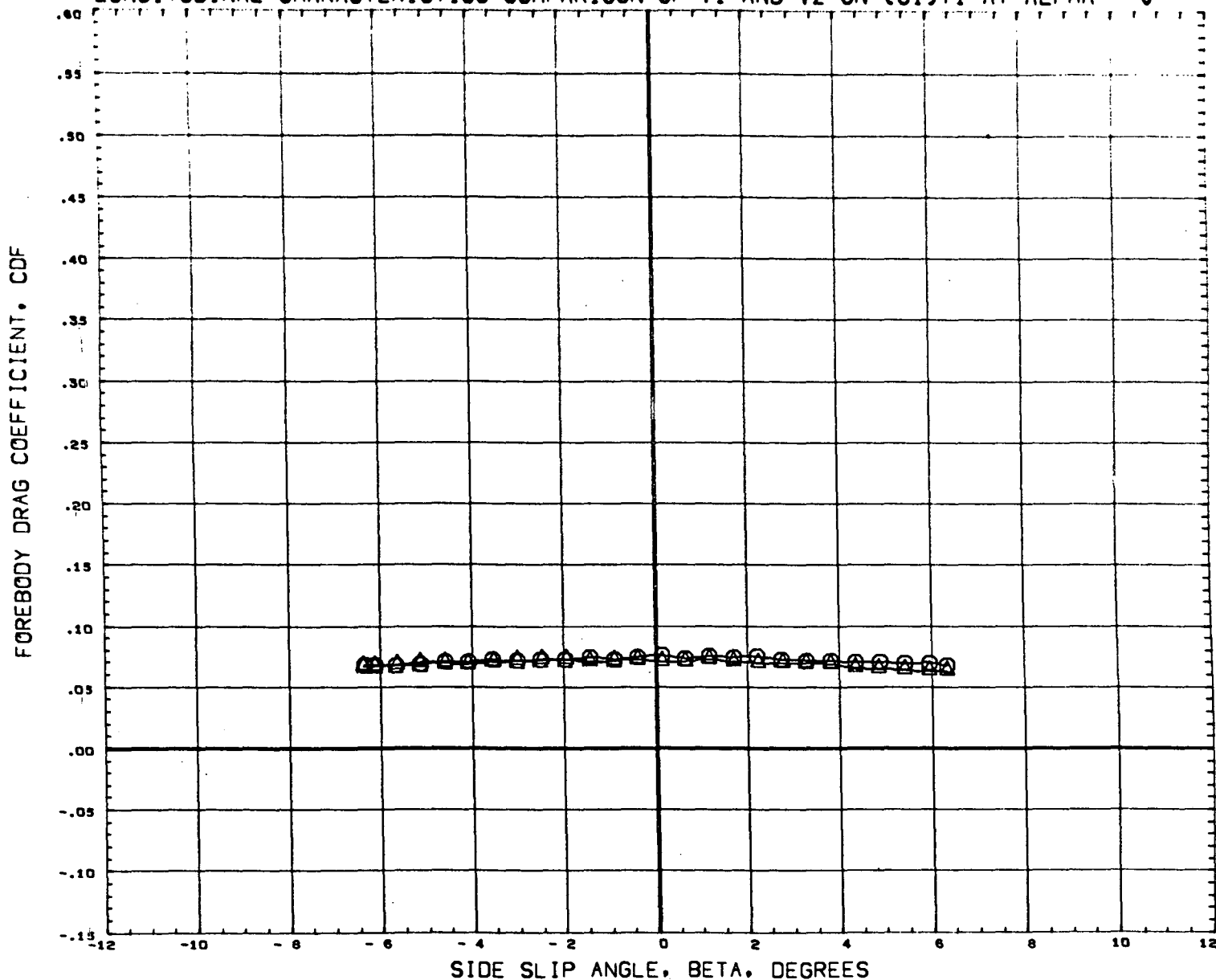
(CD7442) MDAC S-222 COMPOSITE(T-CG) (01V1)T1  
 (DD7448) MDAC S-222 COMPOSITE(T-CG) (01)T1

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060



MACH .60

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# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7442)  MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
(DD7448)  MDAC S-222 COMPOSITE (T-CG) (01) T1

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION

SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

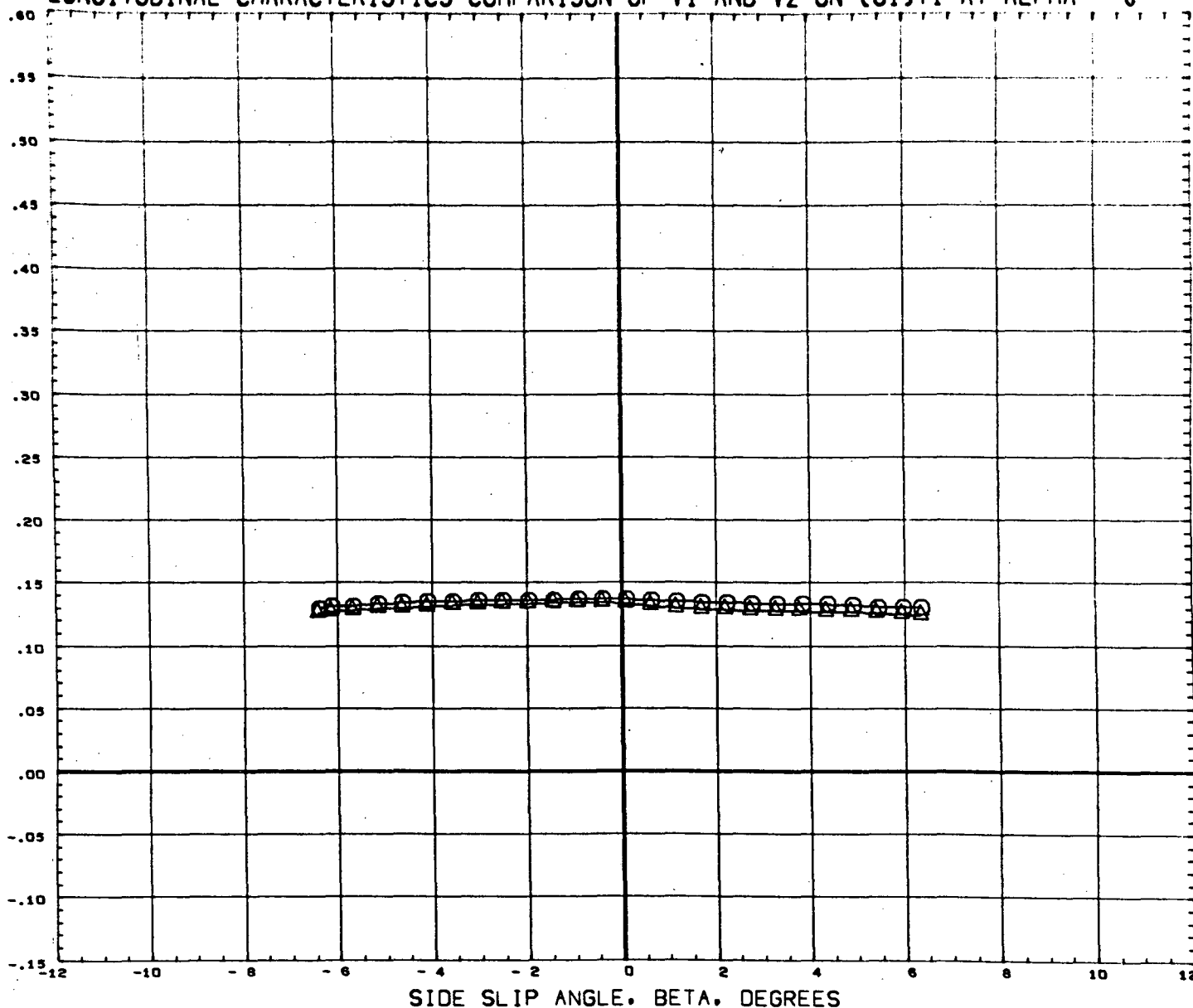
MACH .90

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FOREBODY DRAG COEFFICIENT, CDF

# LONGITUDINAL CHARACTERISTICS COMPARISON OF V1 AND V2 ON (01)T1 AT ALPHA = 0



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(DD7448)	MDAC S-222 COMPOSITE (T-CG) (01) T1	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

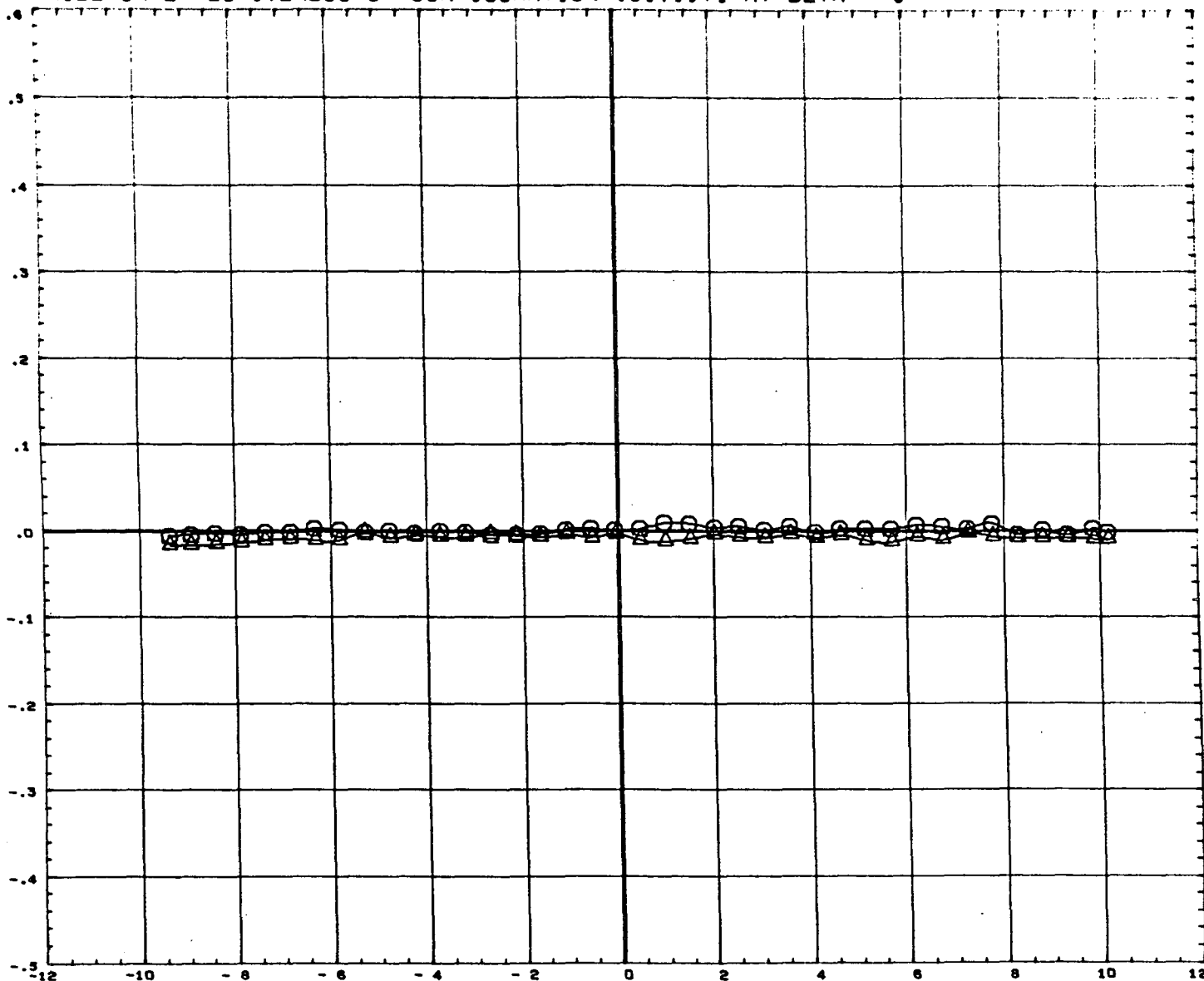
MACH

1.10

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# AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0

LATERAL FORCE COEFFICIENT, CY



ANGLE OF ATTACK, ALPHA, DEGREES

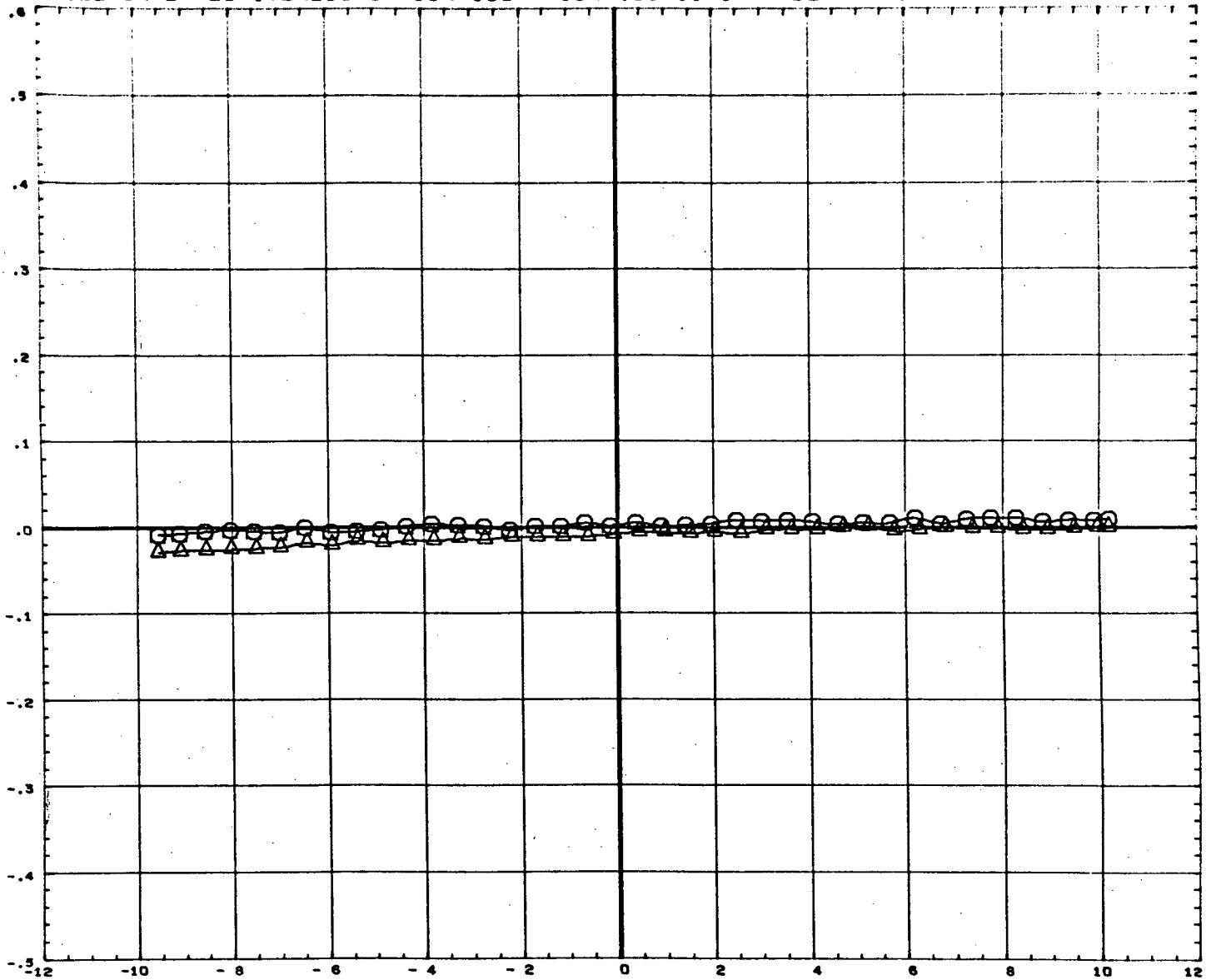
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7443)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH .60

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# AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0

LATERAL FORCE COEFFICIENT, CY



ANGLE OF ATTACK, ALPHA, DEGREES

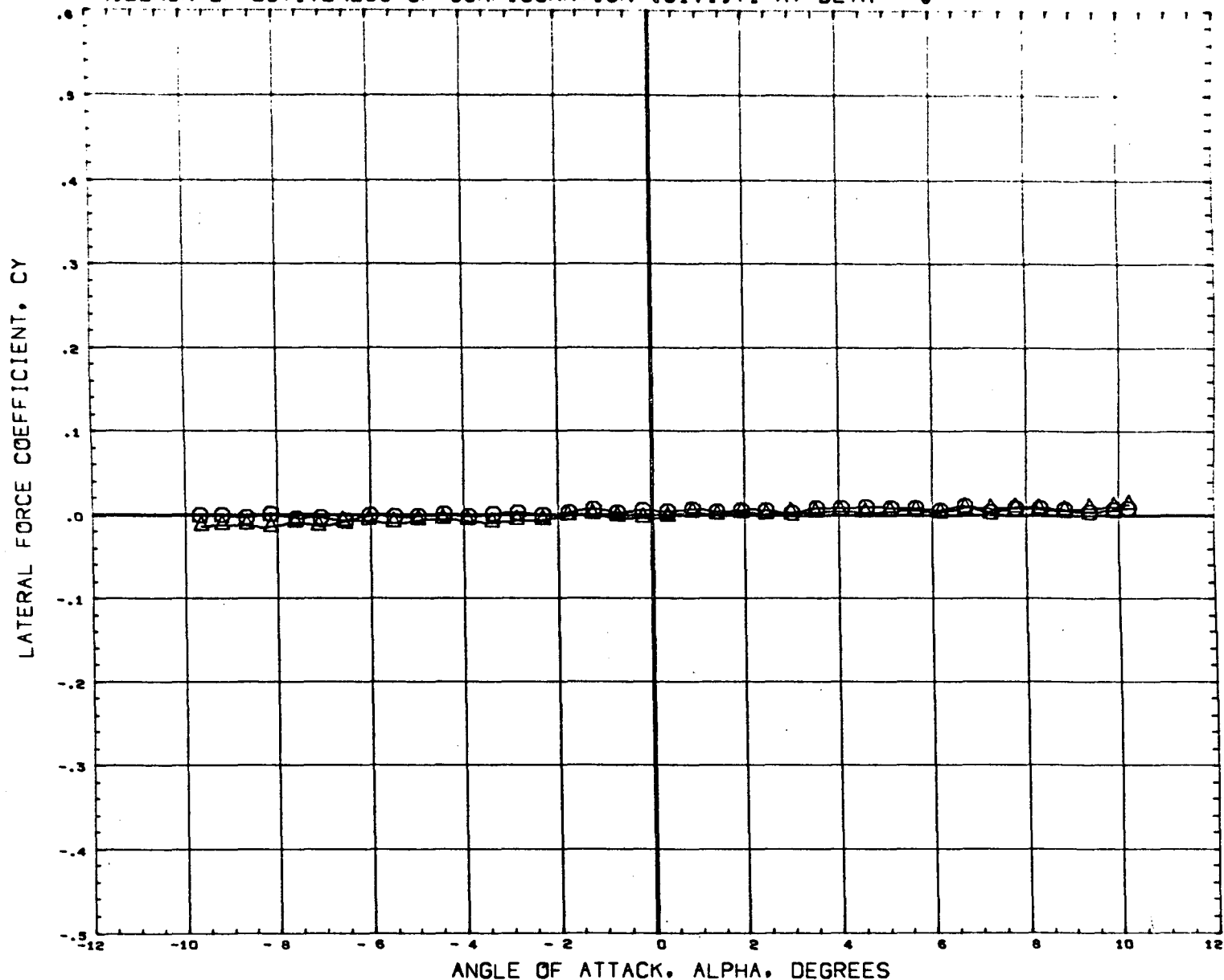
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (RD7441) MDAC S-222 COMPOSITE(T-CG) (01V1)T1  
 (RD7443) MDAC S-222 COMPOSITE(T-CG) (01V1)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	20.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .90

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# AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7441)  $\odot$  MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
 (RD7443)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (01V1)T1

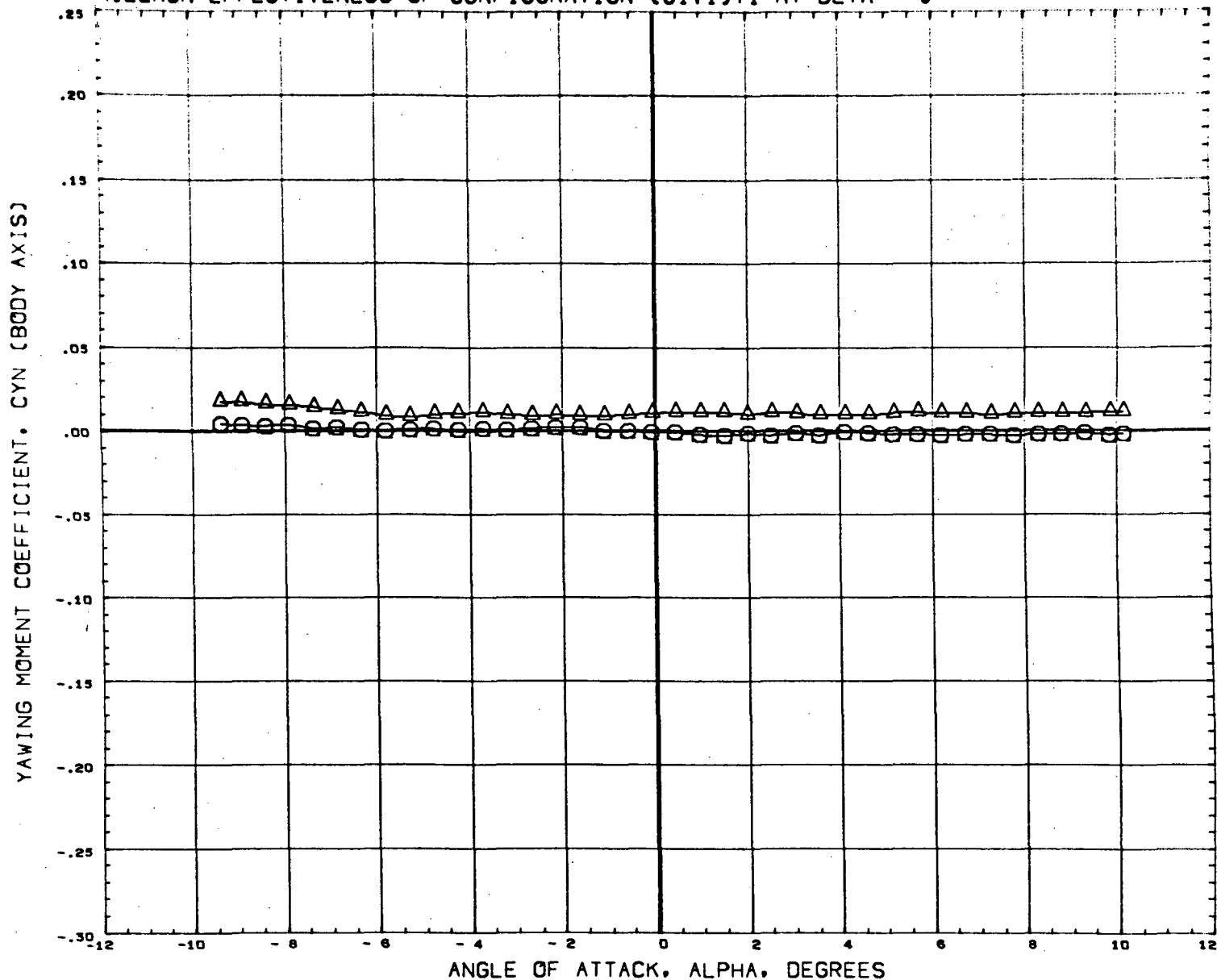
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	20.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

1.10

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# AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0

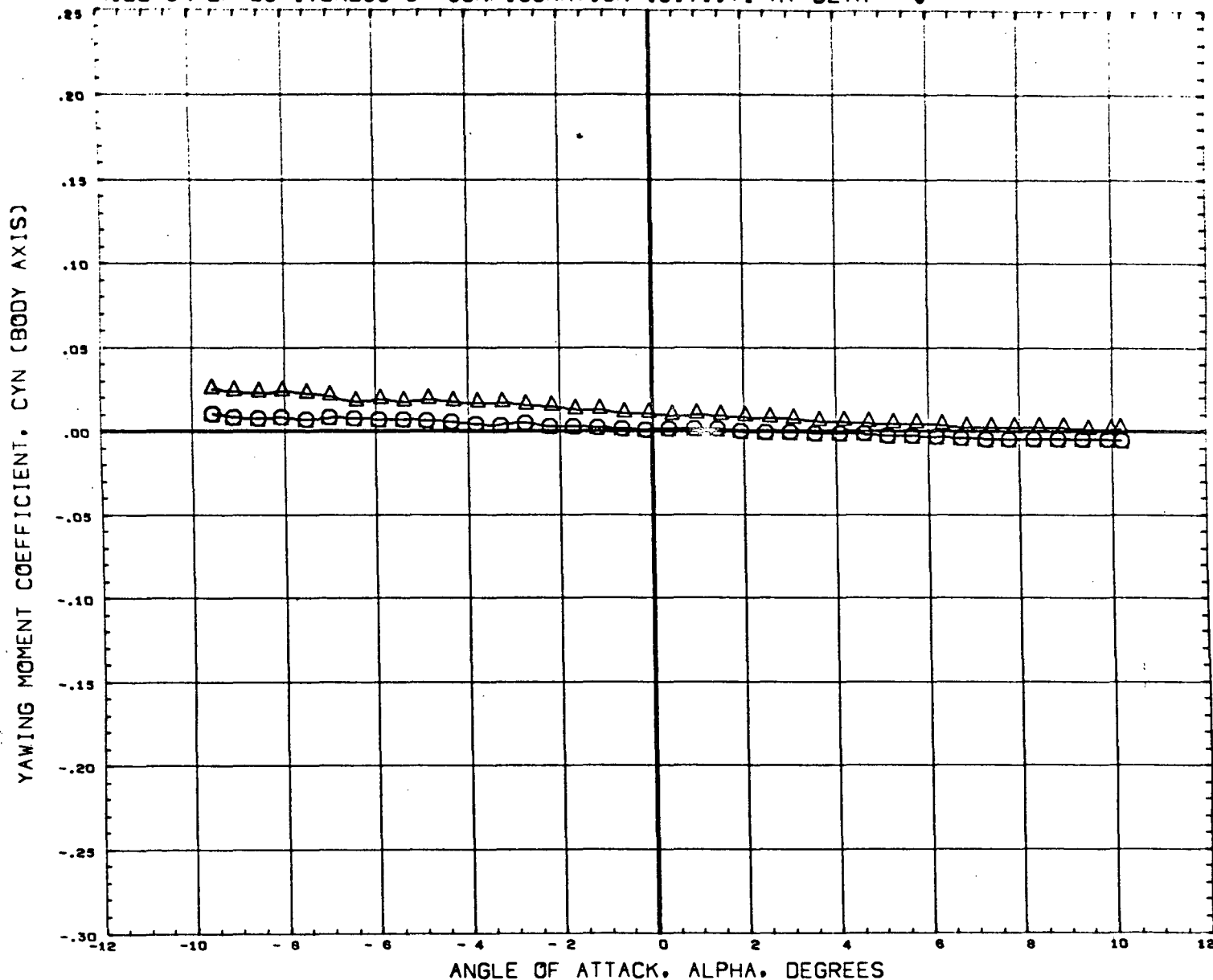


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
(RD7443)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH .60

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# AILERON EFFECTIVENESS OF CONFIGURATION (O1V1)T1 AT BETA = 0

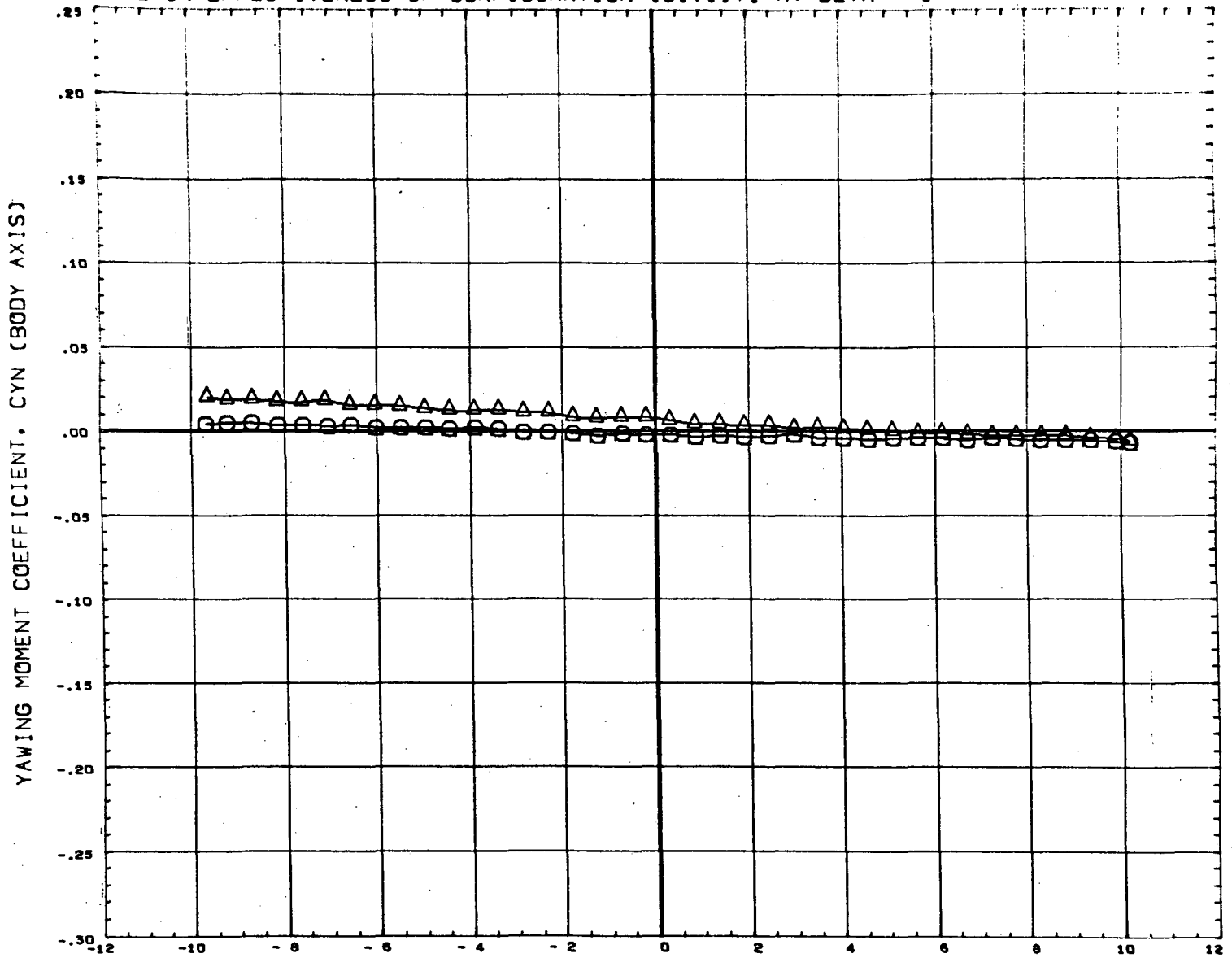


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE(T-CG) (O1V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7443)	MDAC S-222 COMPOSITE(T-CG) (O1V1)T1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRF	557.0004 IN.
						YMRF	0.0000 IN.
						ZMRF	200.0004 IN.
						SCALE	0.0060

MACH .90

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# AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0

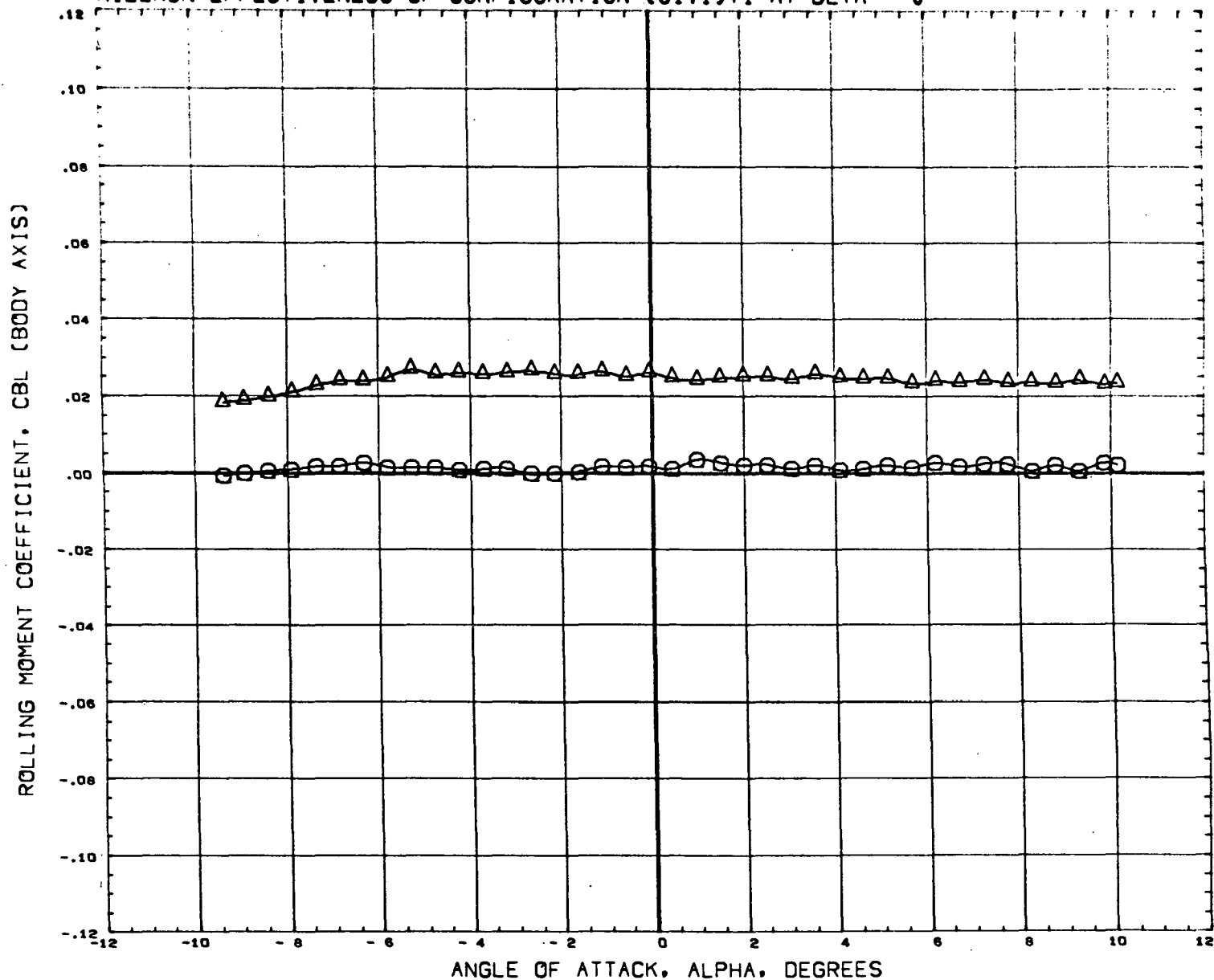


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7443)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.10

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# AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7441) MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
(RD7443) MDAC S-222 COMPOSITE (T-CG) (01V1) T1

BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	20.000	0.000

REFERENCE INFORMATION

SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

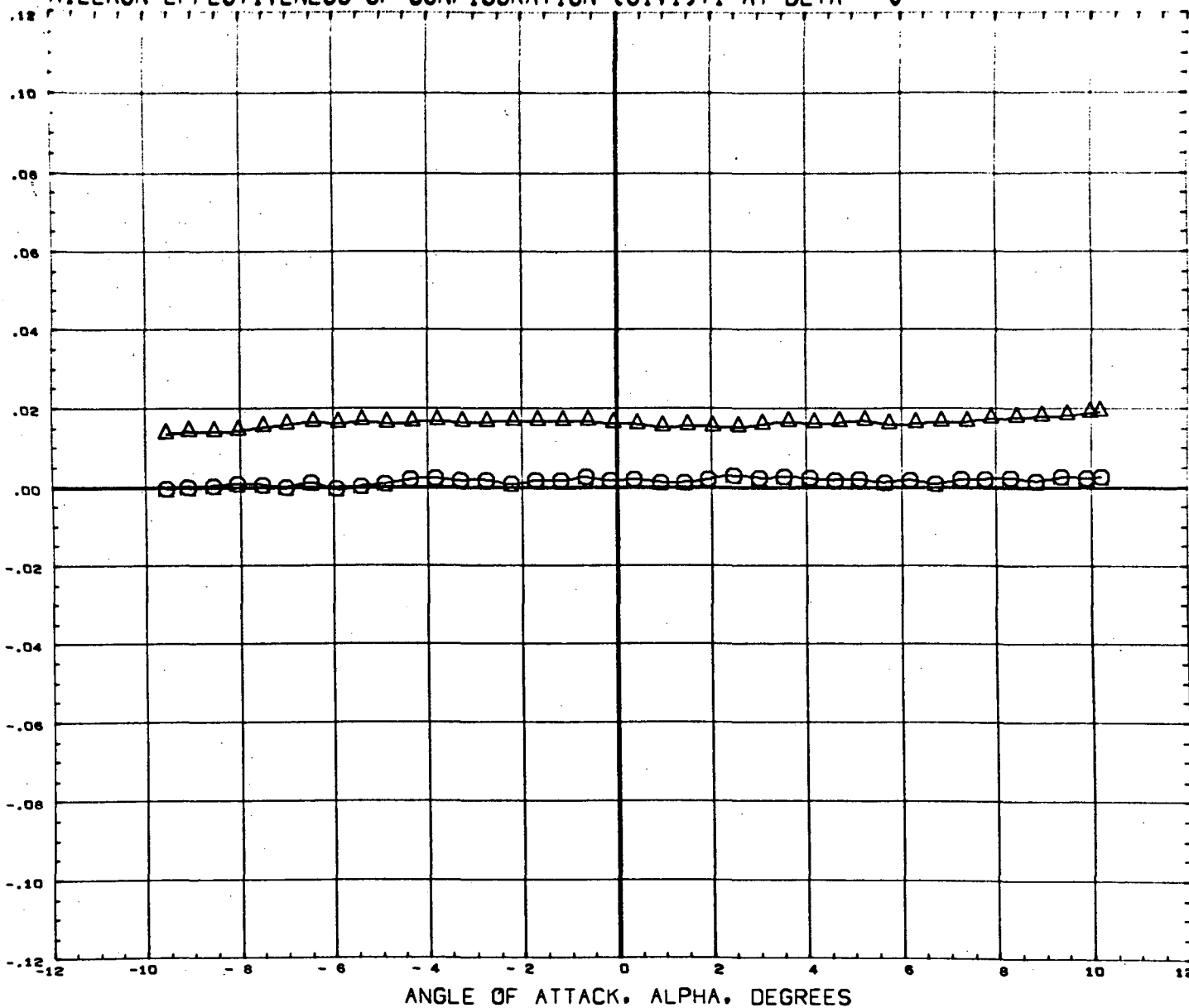
MACH .60

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# AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



DATA SET SYMBOL CONFIGURATION DESCRIPTION

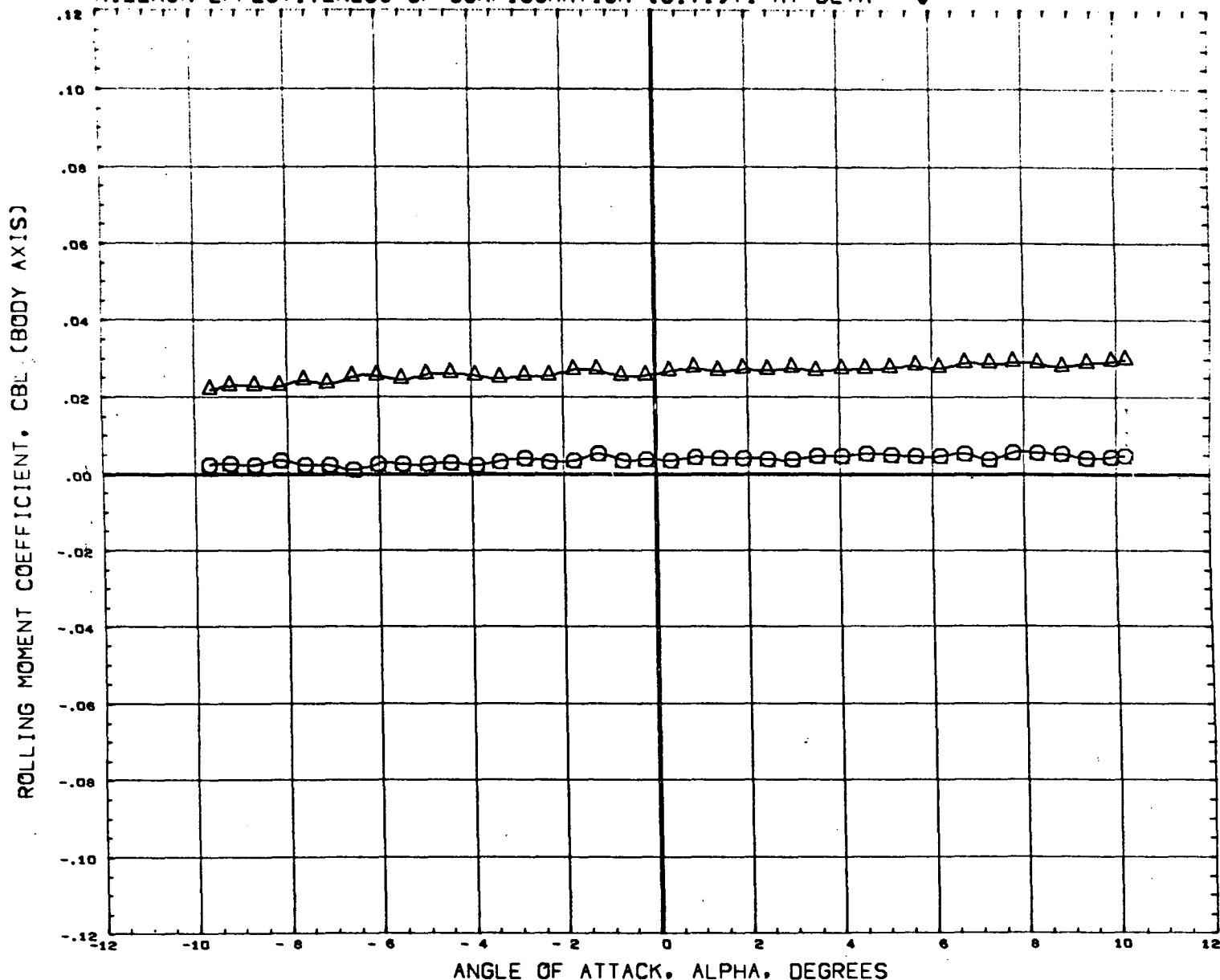
(RD7441)  MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
 (RD7443)  MDAC S-222 COMPOSITE (T-CG) (01V1) T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	20.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .90

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# AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0

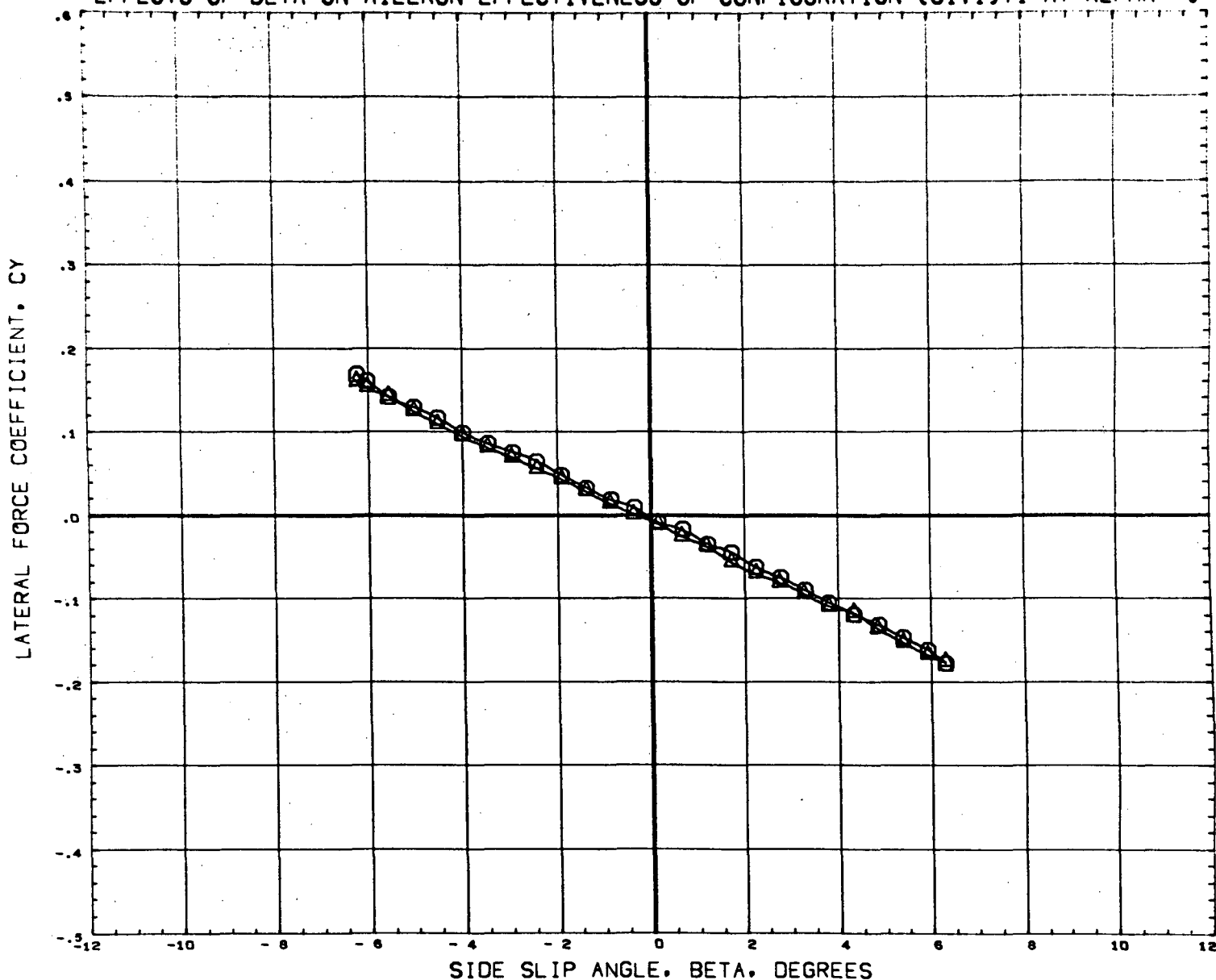


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7443)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.10

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

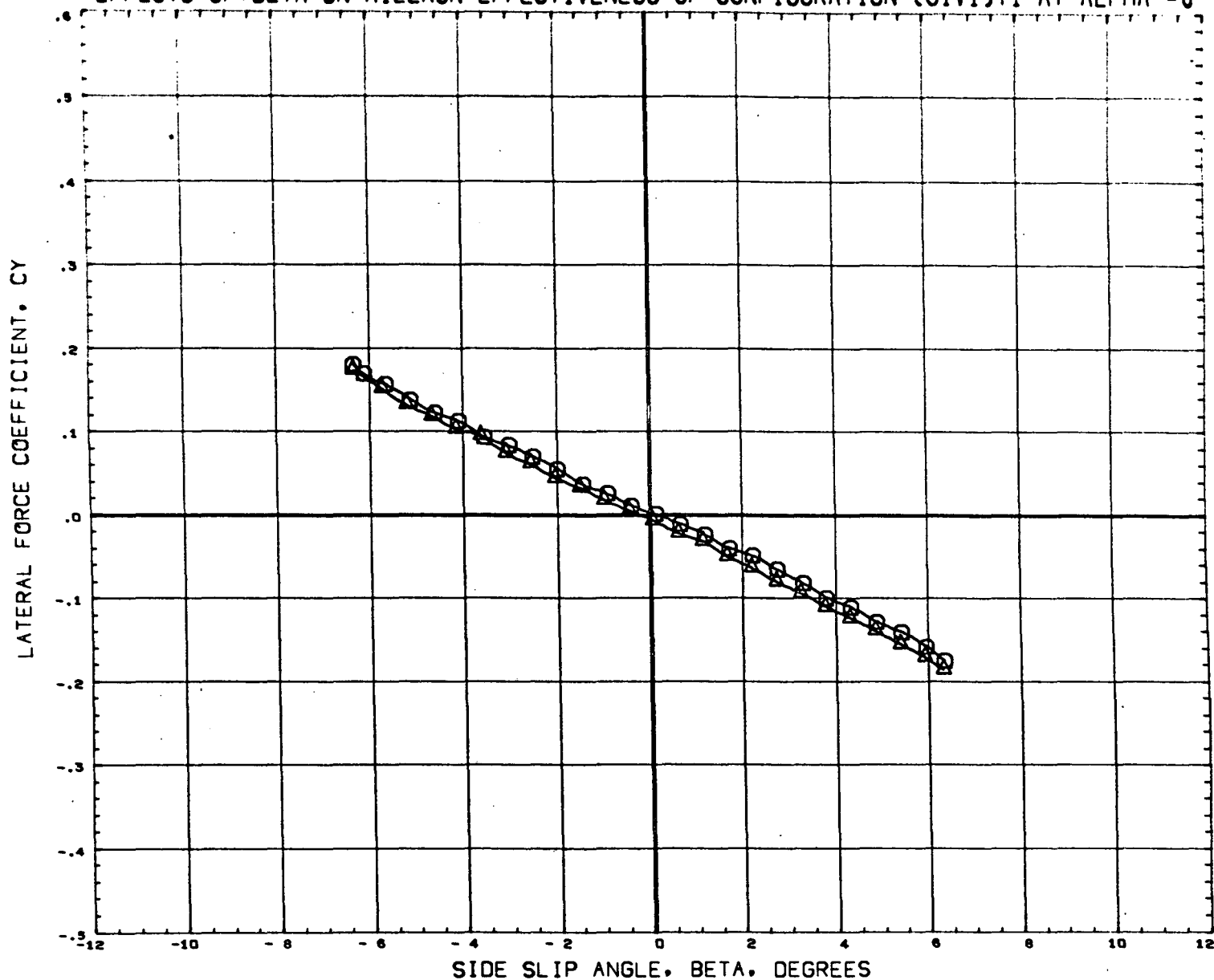


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7442)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7444)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH .60

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442)  $\odot$  MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
 (RD7444)  $\Delta$  MDAC S-222 COMPOSITE (T-CG) (01V1) T1

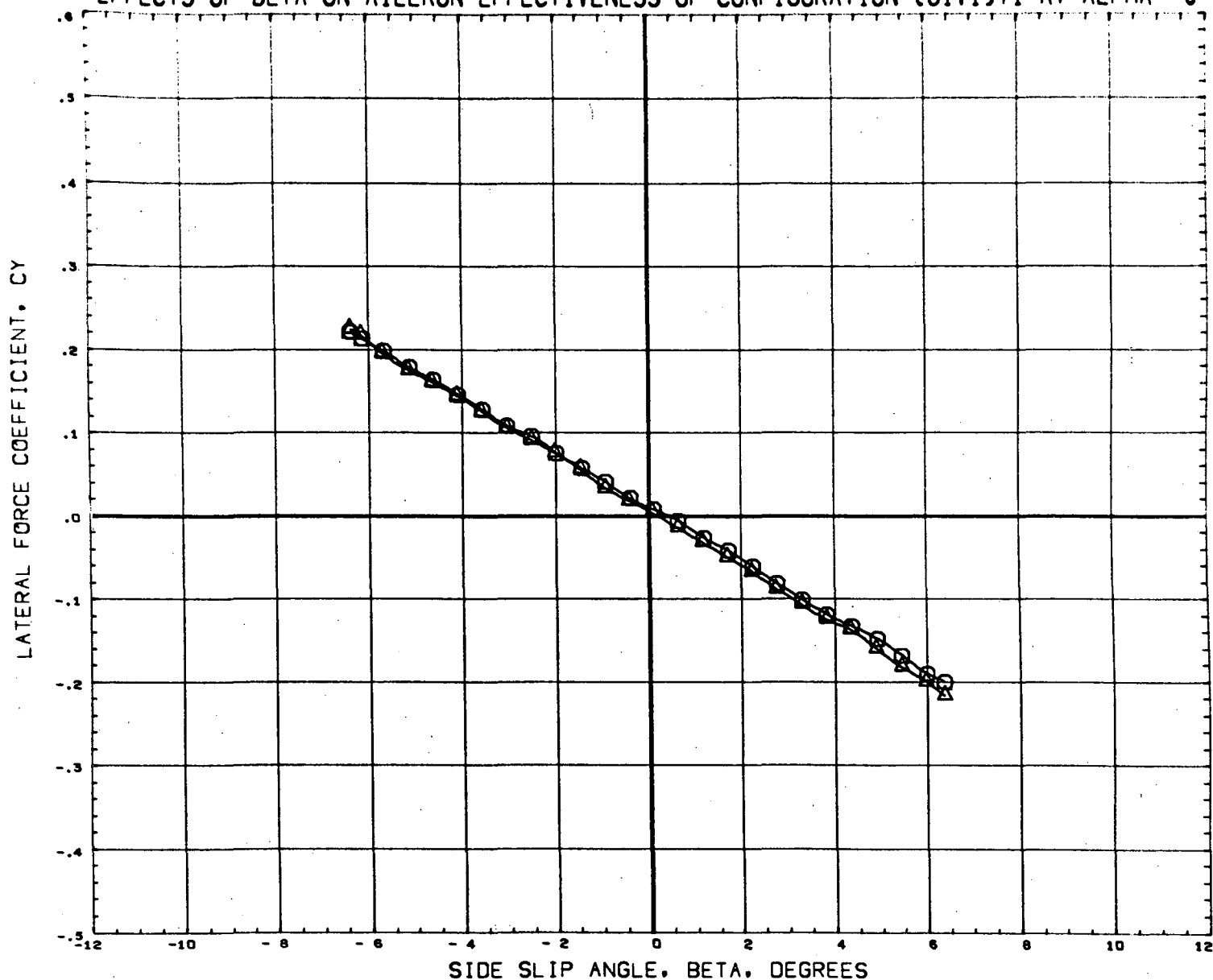
ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	20.000	0.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ. FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

MACH .90

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (O1V1)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442) (O) MDAC S-222 COMPOSITE (T-CG) (O1V1)T1

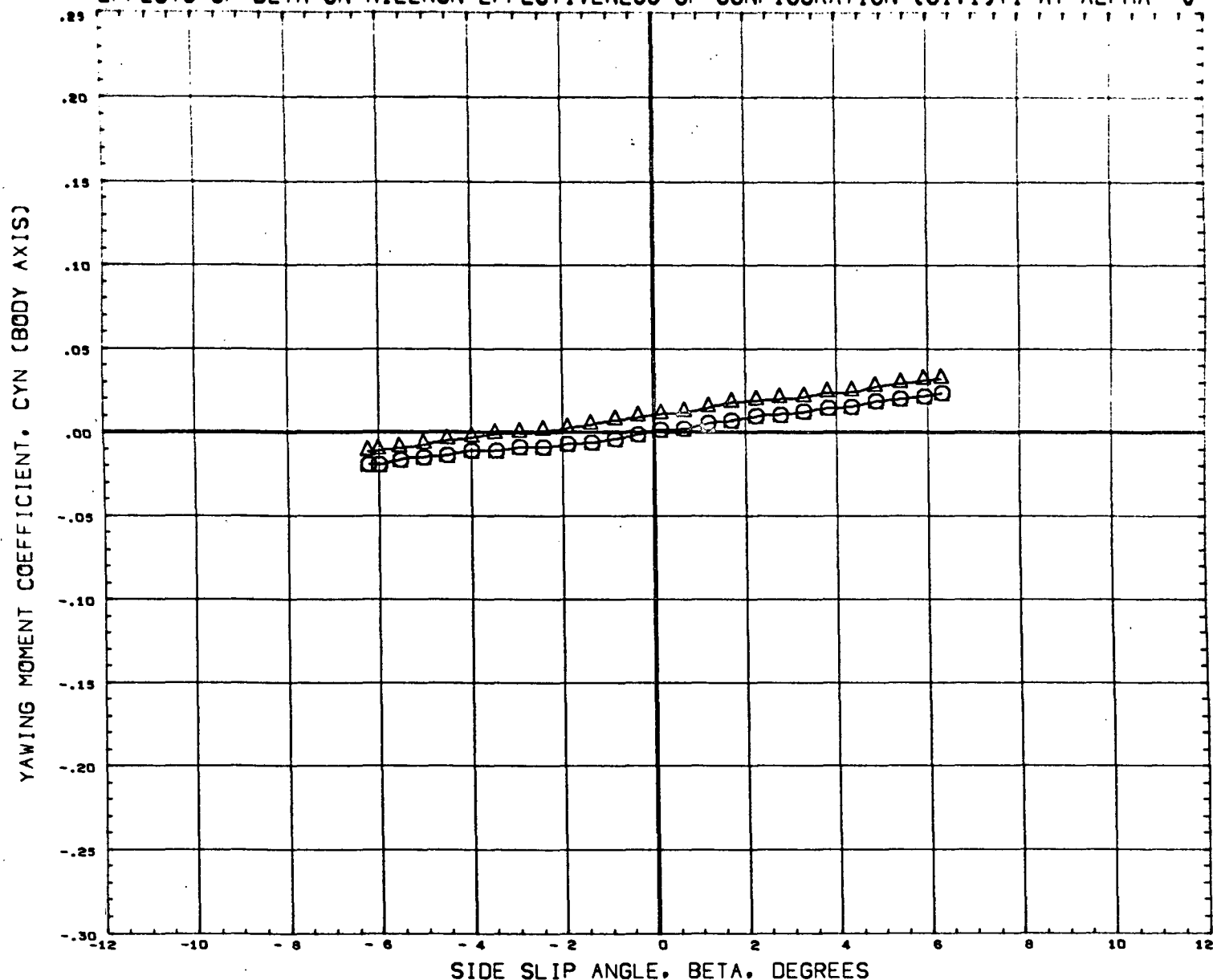
(RD7444) (A) MDAC S-222 COMPOSITE (T-CG) (O1V1)T1

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
0.000	0.000	20.000	0.000	LREF	609.5004	IN.
				BREF	882.0004	IN.
				XMRP	557.0004	IN.
				YMRP	0.0000	IN.
				ZMRP	200.0004	IN.
				SCALE	0.0060	

MACH 1.10

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442)  $\Delta$  MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
 (RD7444)  $\circ$  MDAC S-222 COMPOSITE (T-CG) (01V1)T1

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	20.000	0.000

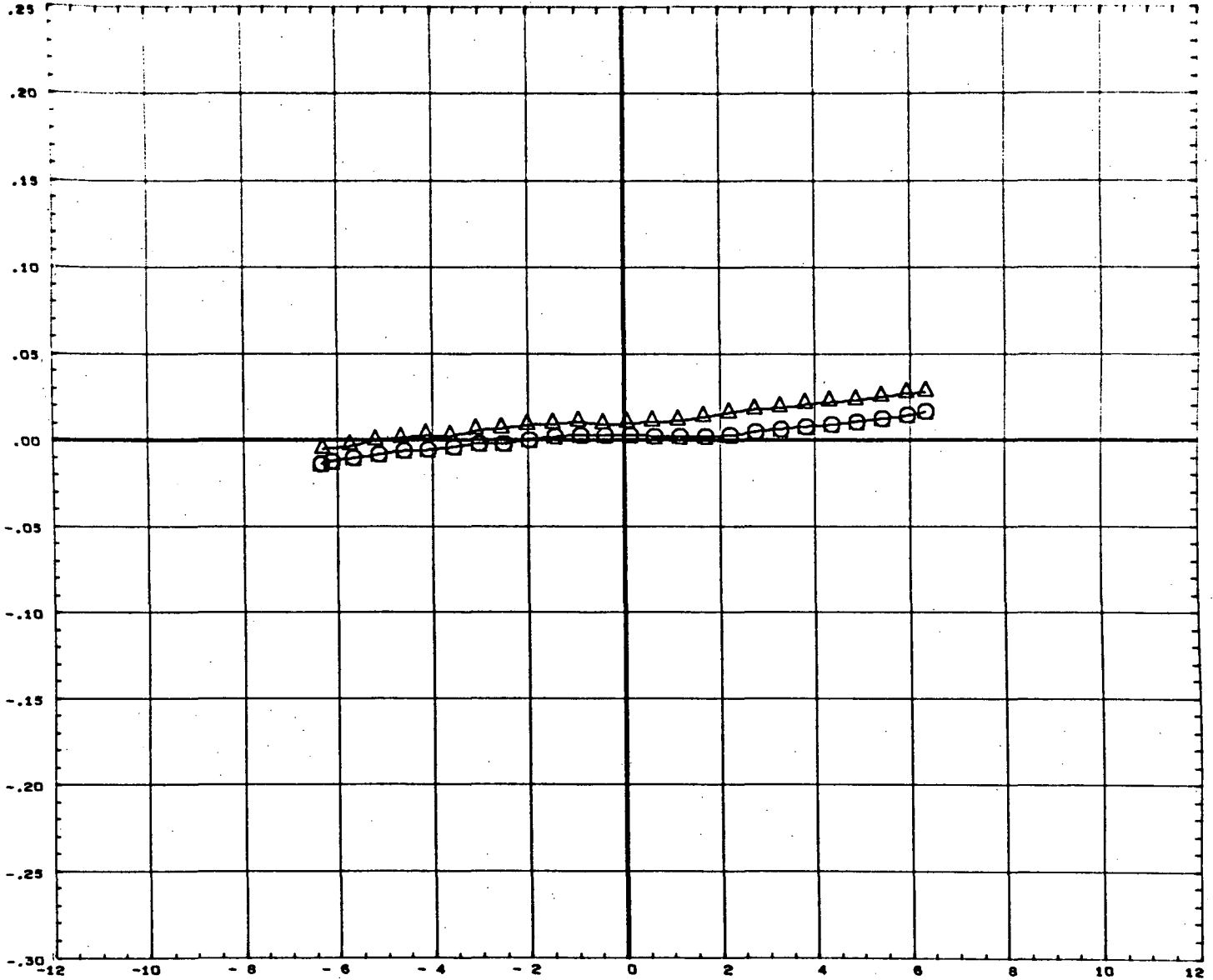
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .60

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442)  MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
 (RD7444)  MDAC S-222 COMPOSITE (T-CG) (01V1)T1

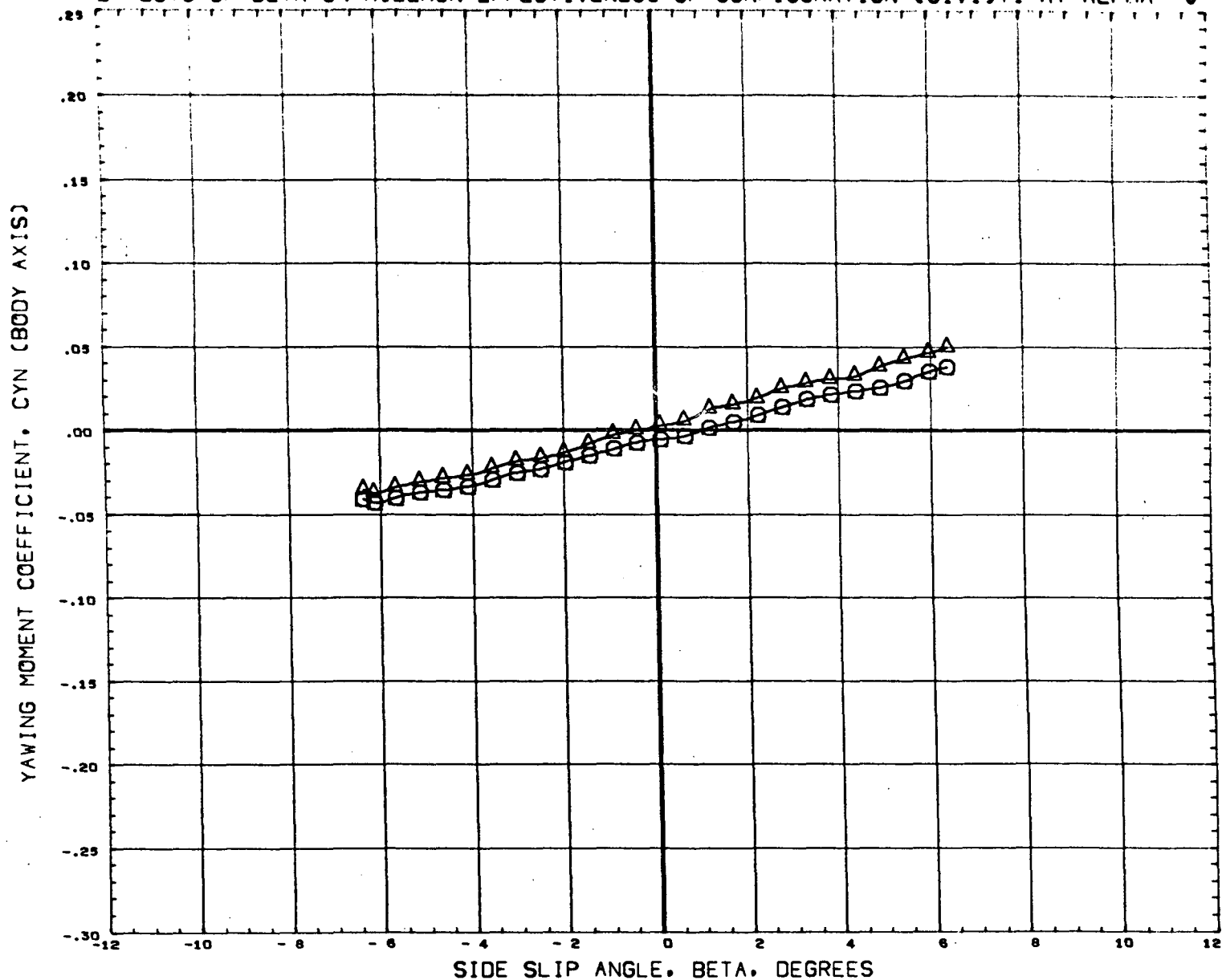
ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	20.000	0.000



REFERENCE INFORMATION		
SREF	3155.3040	SQ. FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .90

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RD7442) 	MDAC S-222 COMPOSITE (T-CG) (01V1)T1
(RD7444) 	MDAC S-222 COMPOSITE (T-CG) (01V1)T1

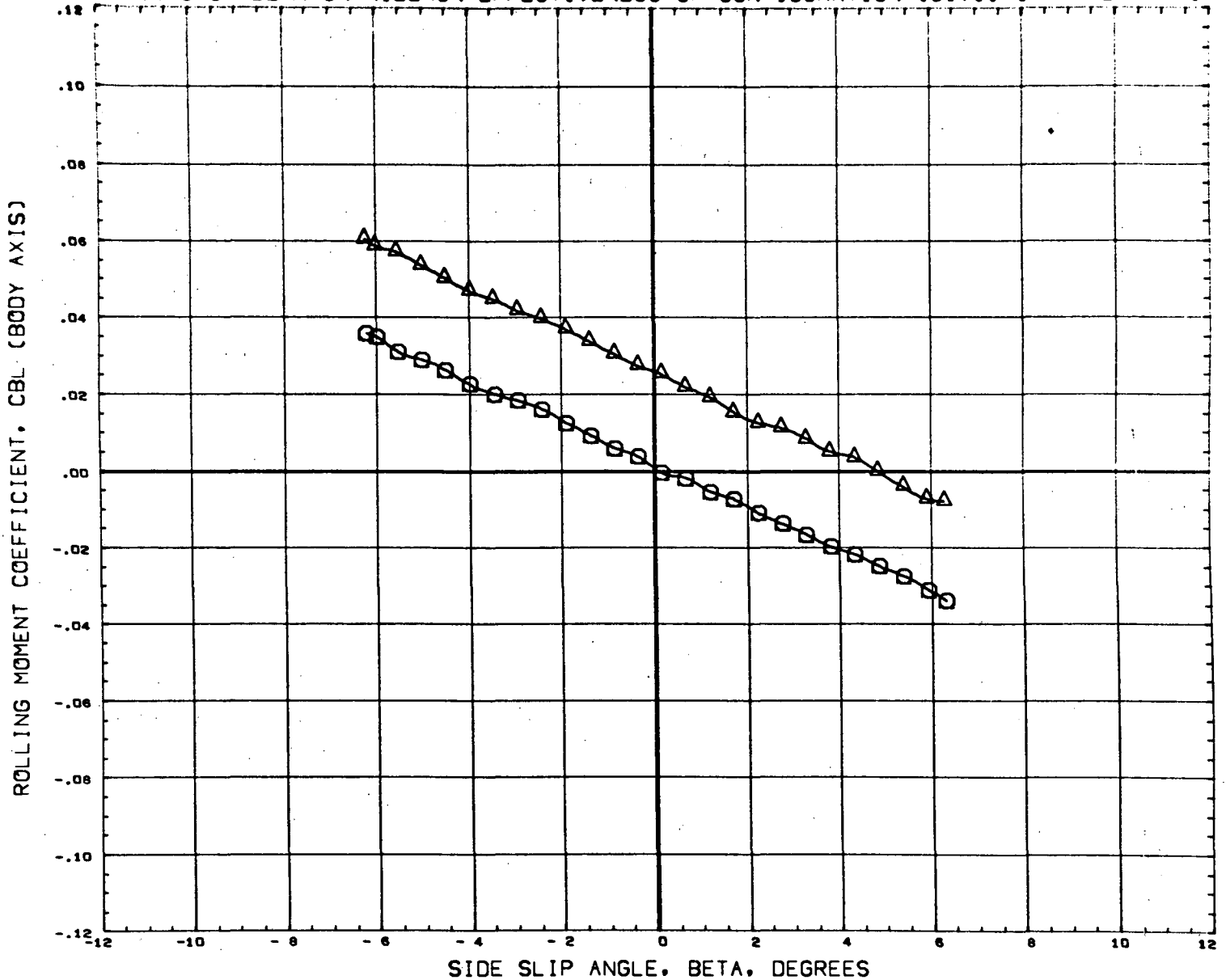
ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	20.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	537.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 1.10

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

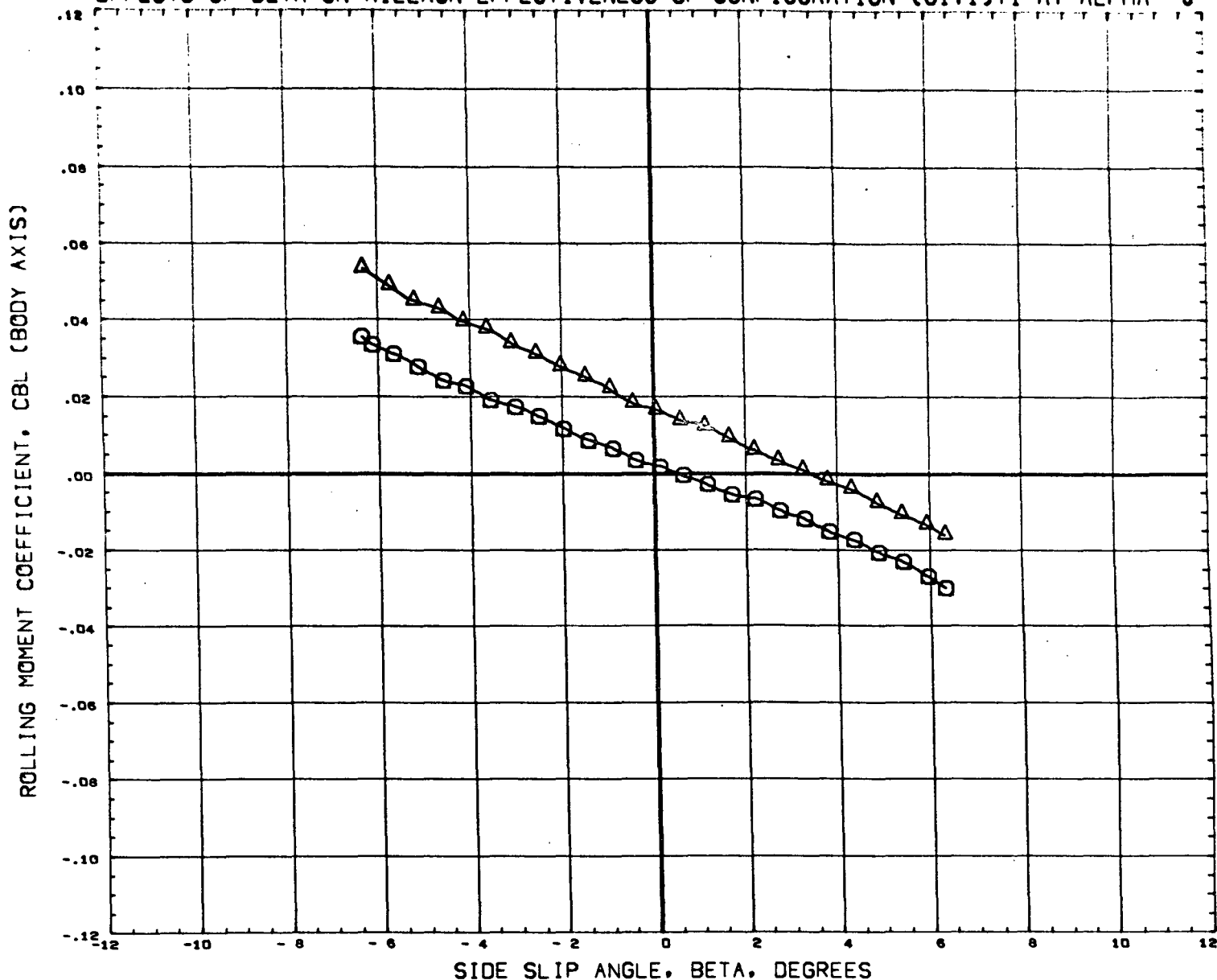


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7444)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH .60

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

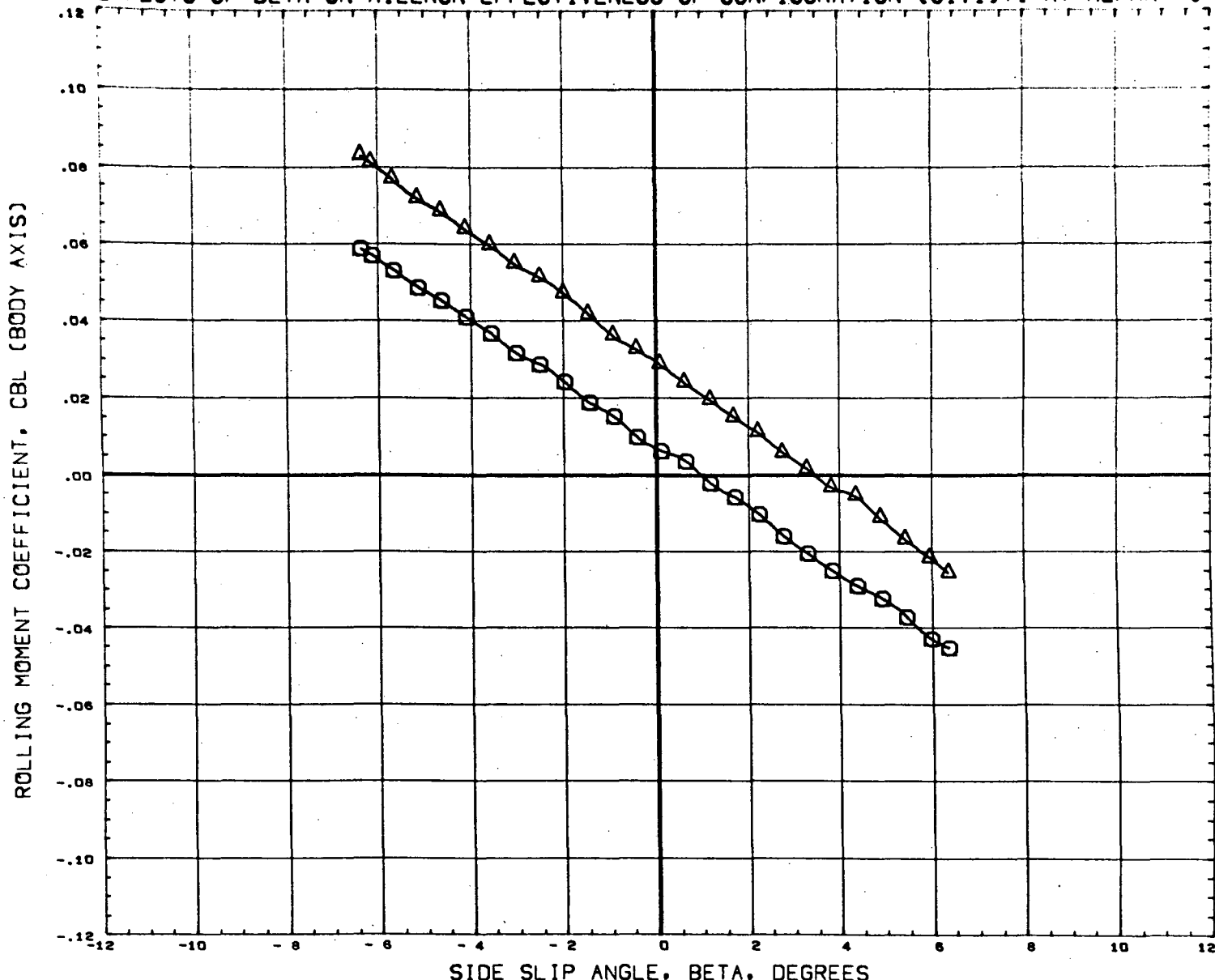


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7444)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	20.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH .90

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# EFFECTS OF BETA ON AILERON EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0



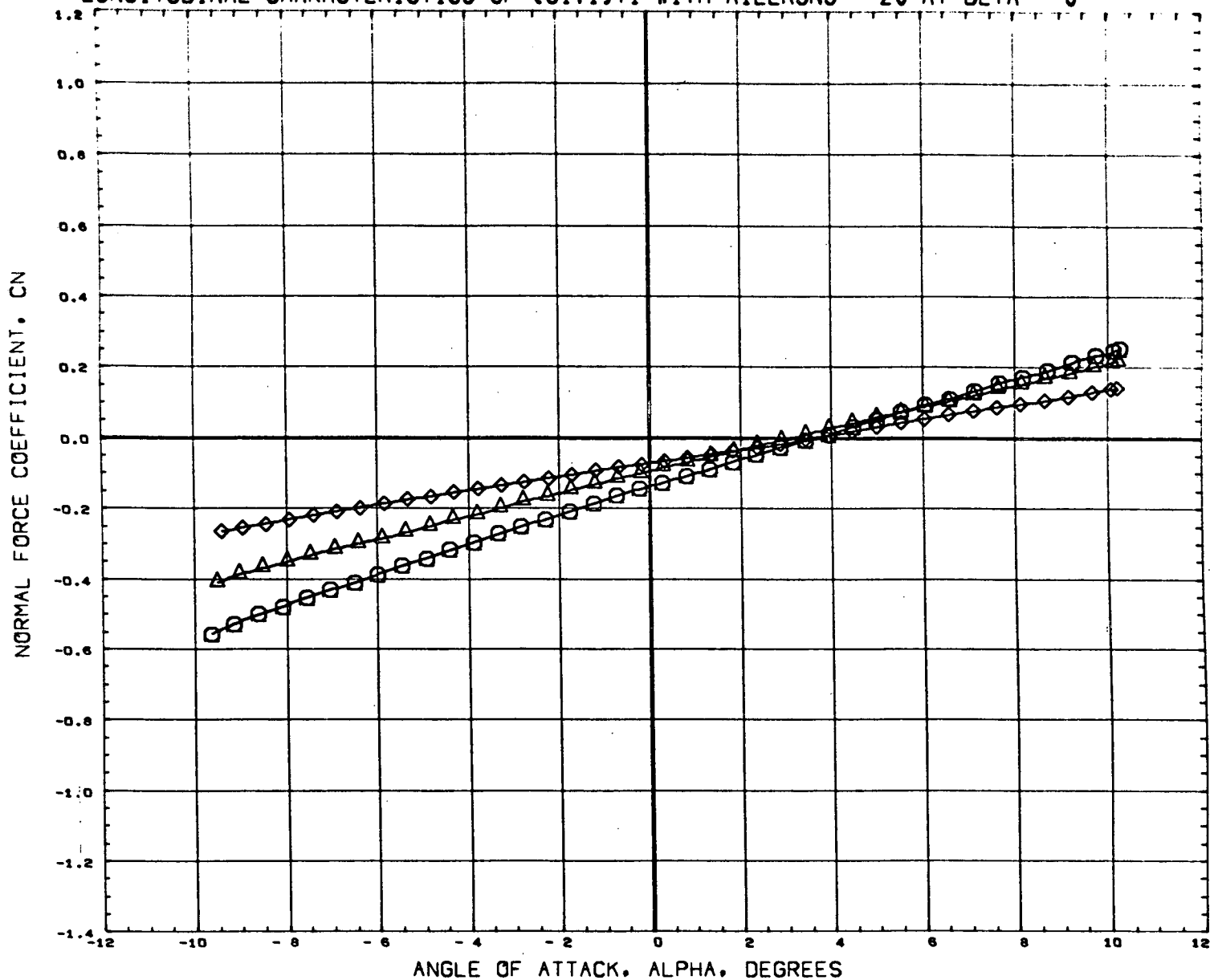
DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
(RD7442)    ○    MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
(RD7444)    △    MDAC S-222 COMPOSITE (T-CG) (01V1)T1

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	20.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH      1.10

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# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

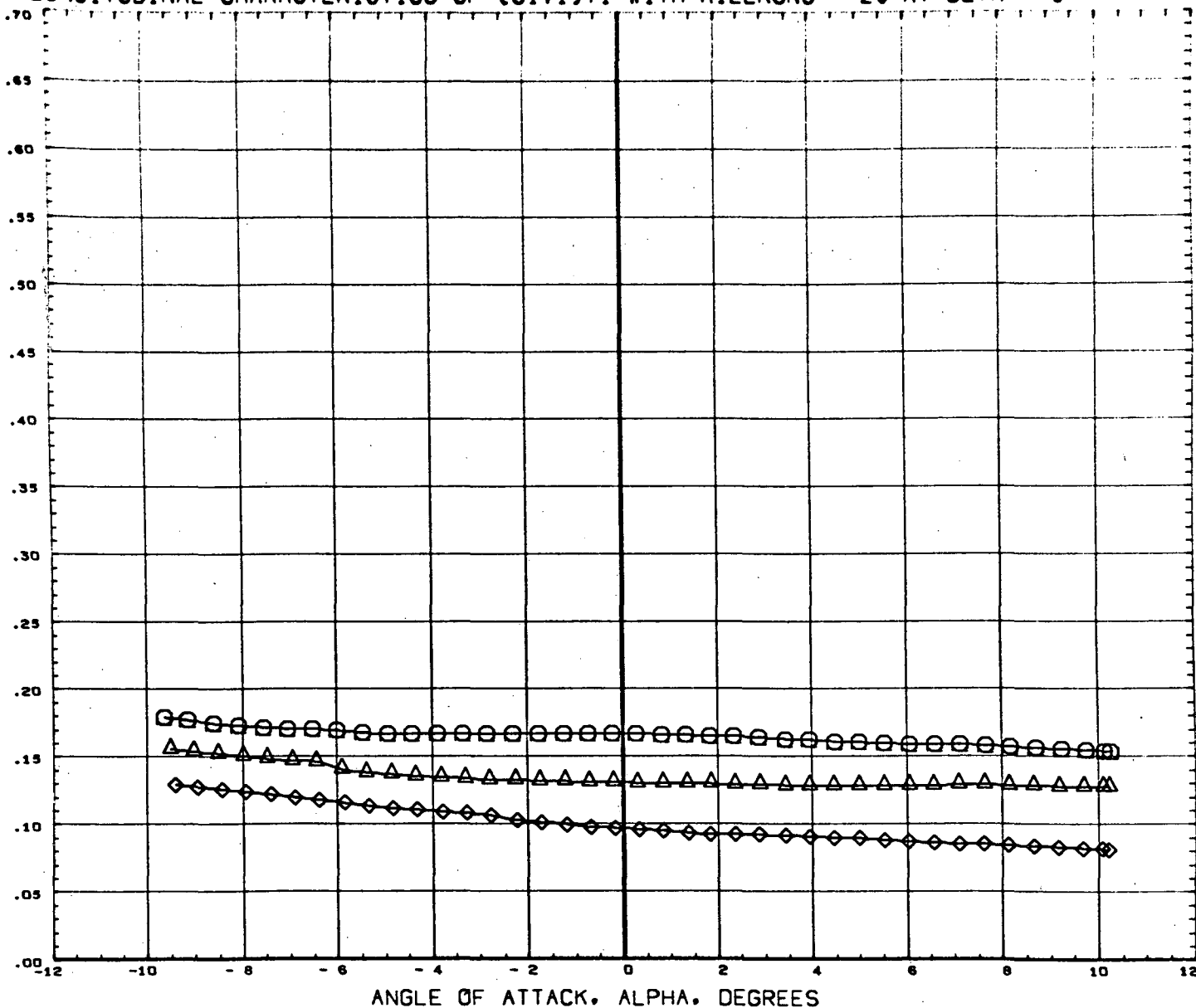
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD74B7) 12 SEP 72 PAGE 370

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0

AXIAL FORCE COEFFICIENT, CA



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

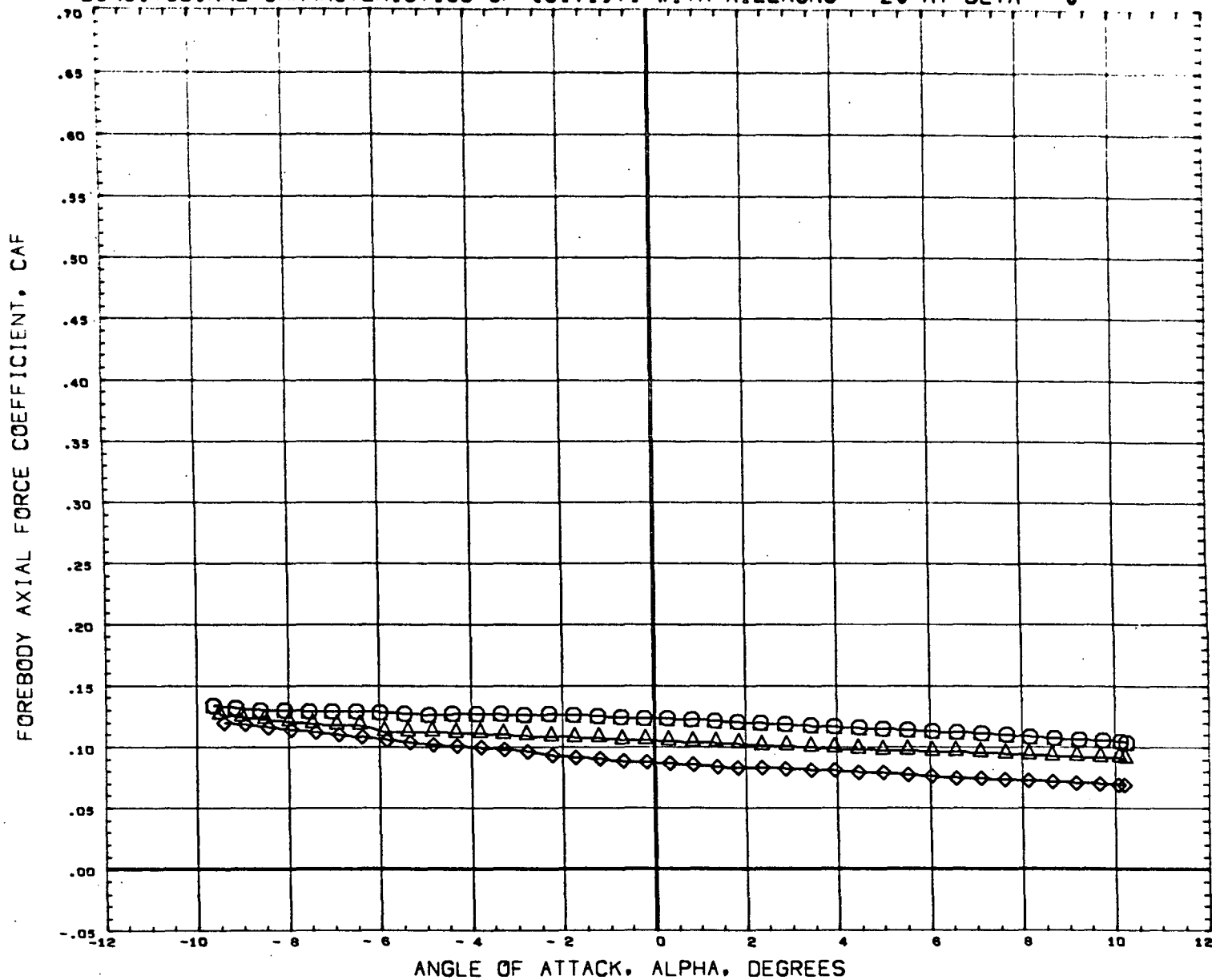
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LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	209.0004	IN.
SCALE	0.0060	SCALE

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD74B7) 12 SEP 72 PAGE 371

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

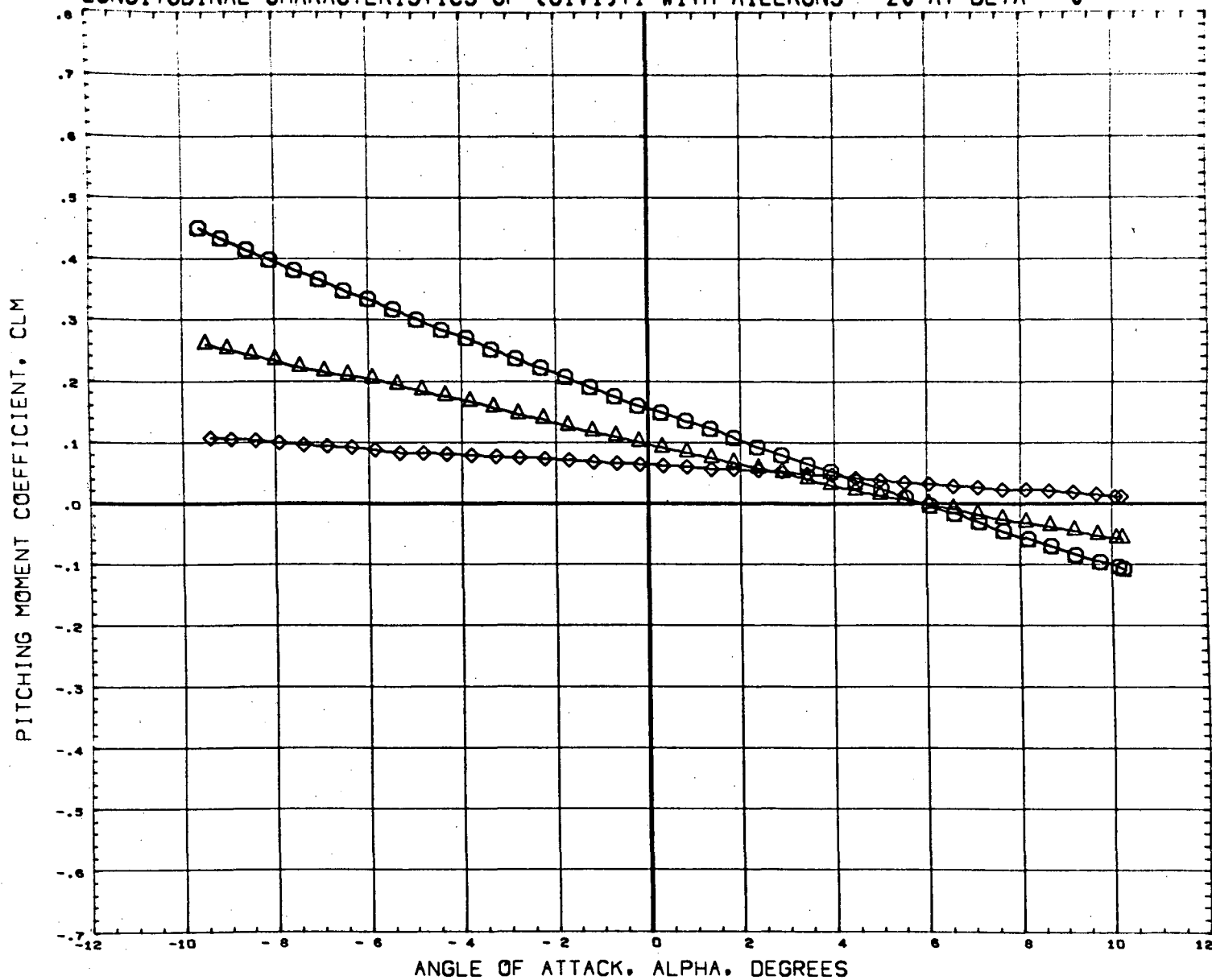
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LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD7487) 12 SEP 72 PAGE 372

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

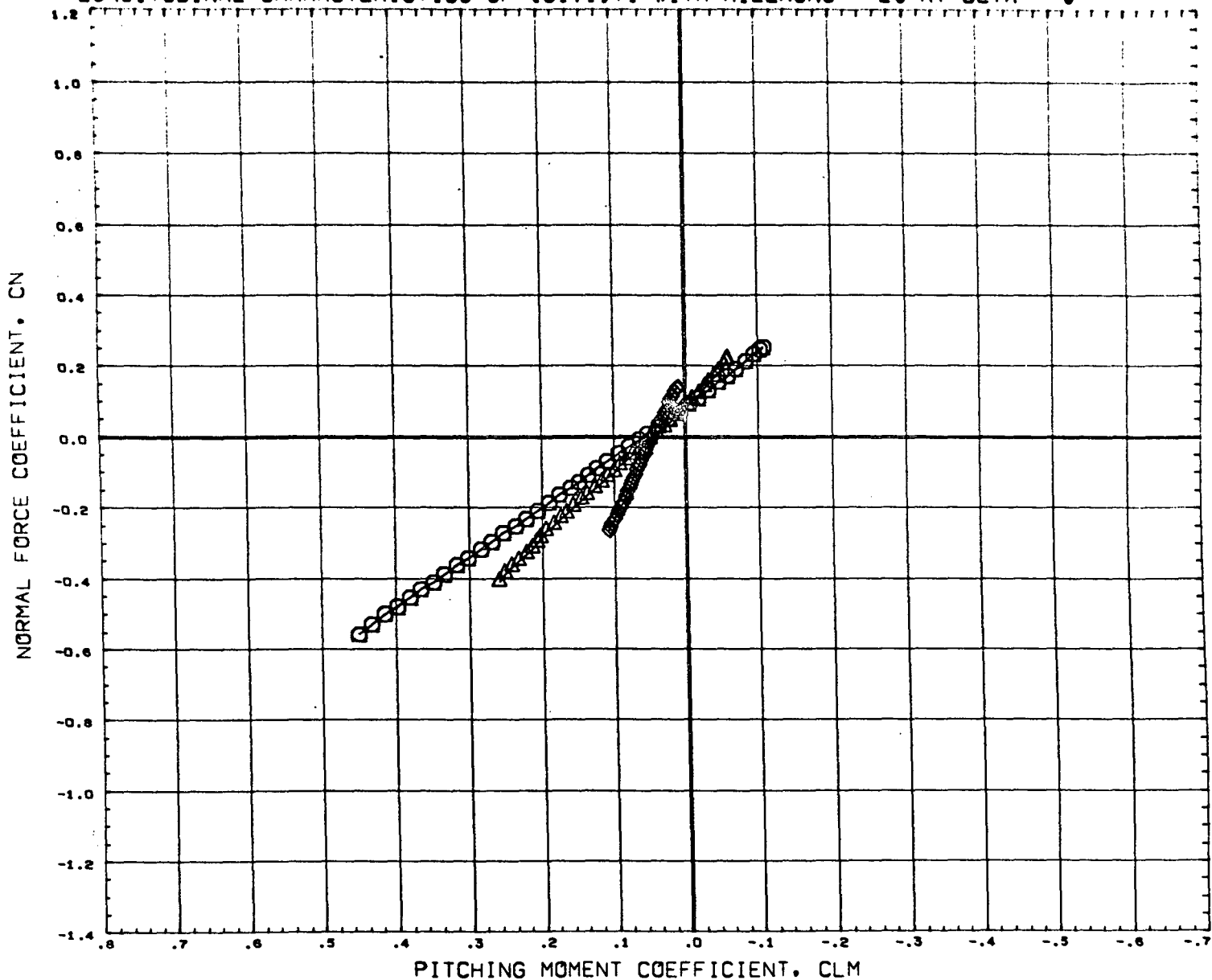
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LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD74B7) 12 SEP 72 PAGE 373

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.907	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

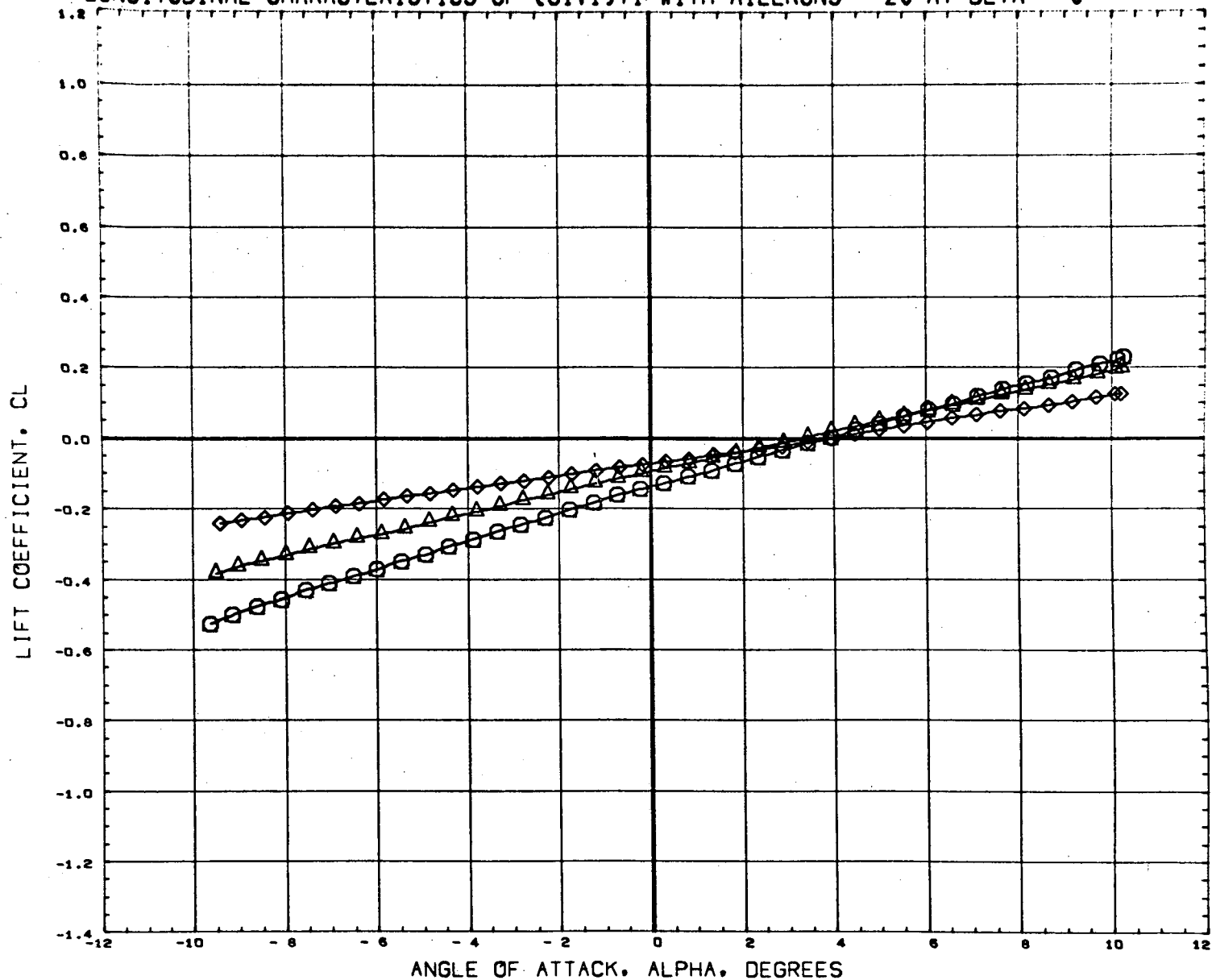
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD7487) 12 SEP 72 PAGE 374



# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.307	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
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YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

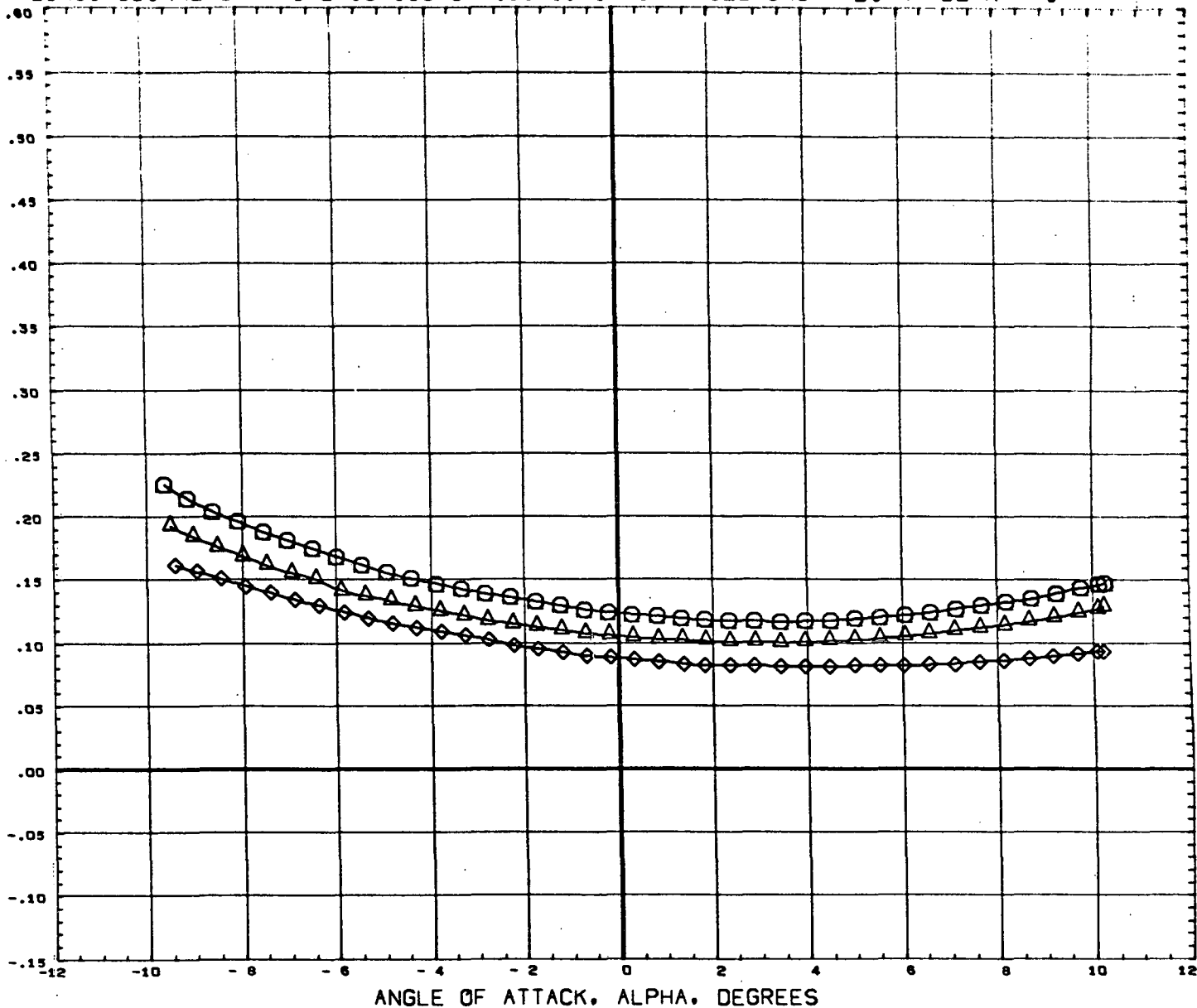
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD7487) 12 SEP 72 PAGE 375

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

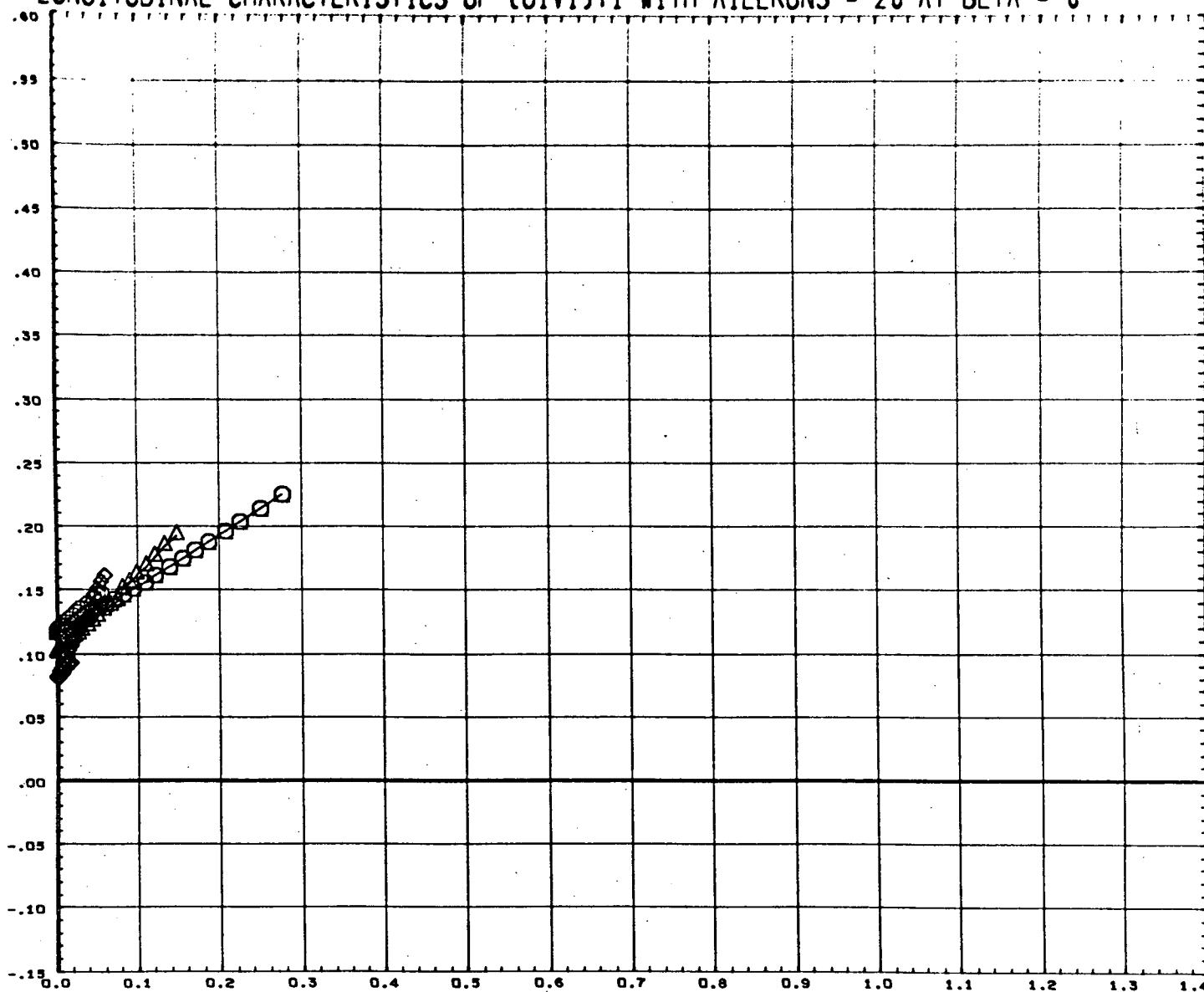
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD74B7) 12 SEP 72 PAGE 376

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQ

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

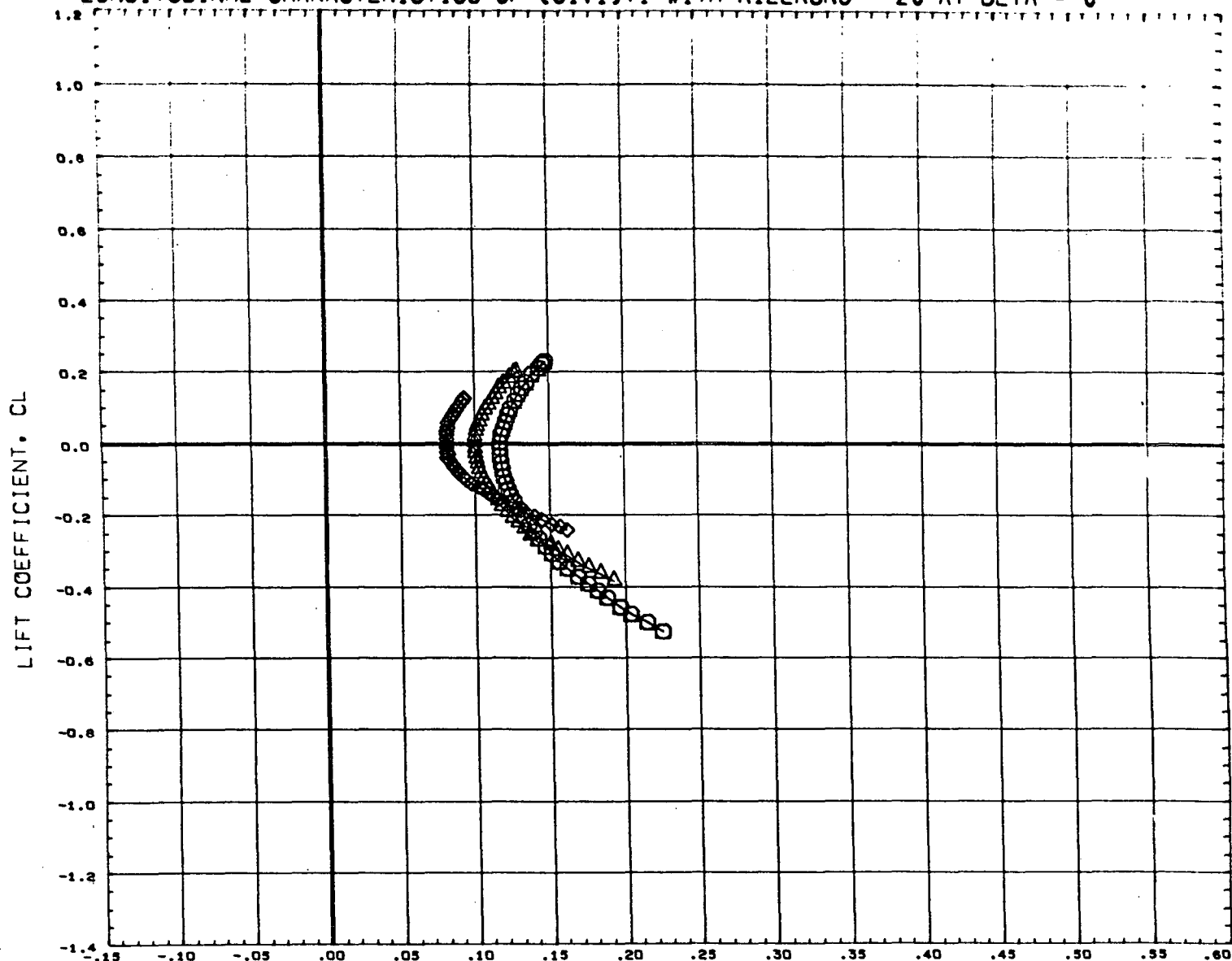
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BREF	882.0004	IN.
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YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD74B7) 12 SEP 72 PAGE 377

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

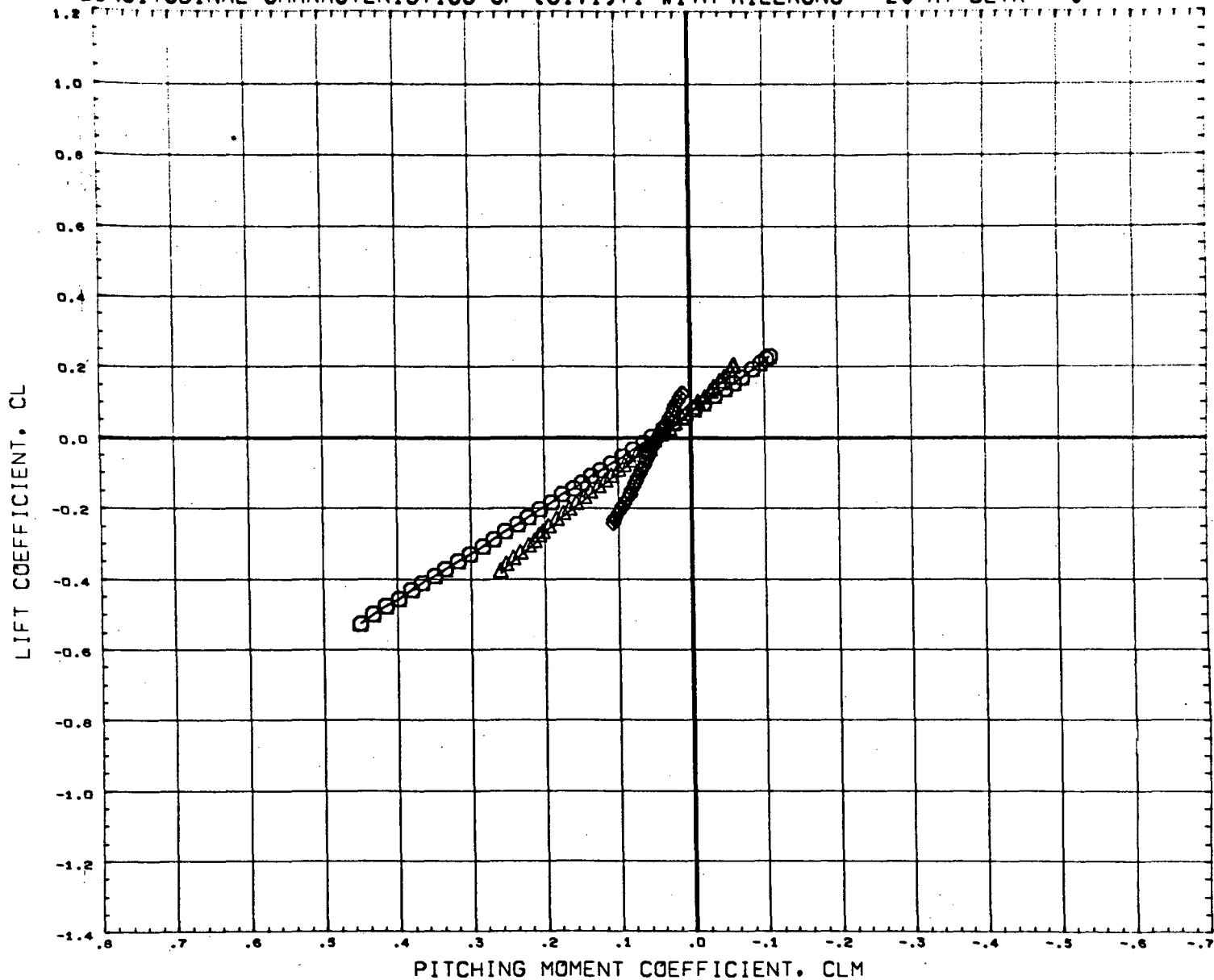
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LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD7487) 12 SEP 72 PAGE 378

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SO.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

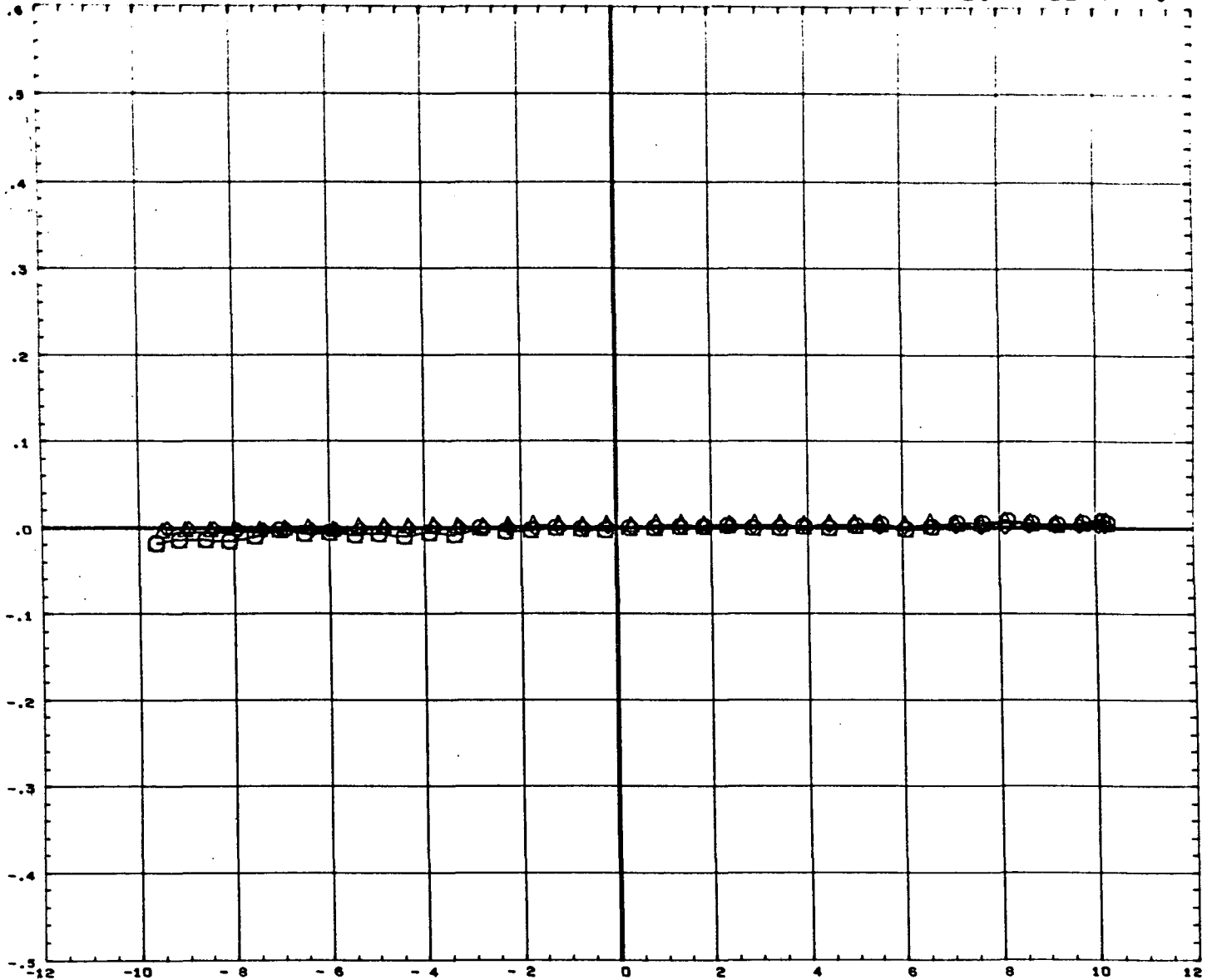
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(C074B7) 12 SEP 72 PAGE 379

# LATERAL-DIRECTIONAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0

LATERAL FORCE COEFFICIENT, CY



ANGLE OF ATTACK, ALPHA, DEGREES

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.293	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

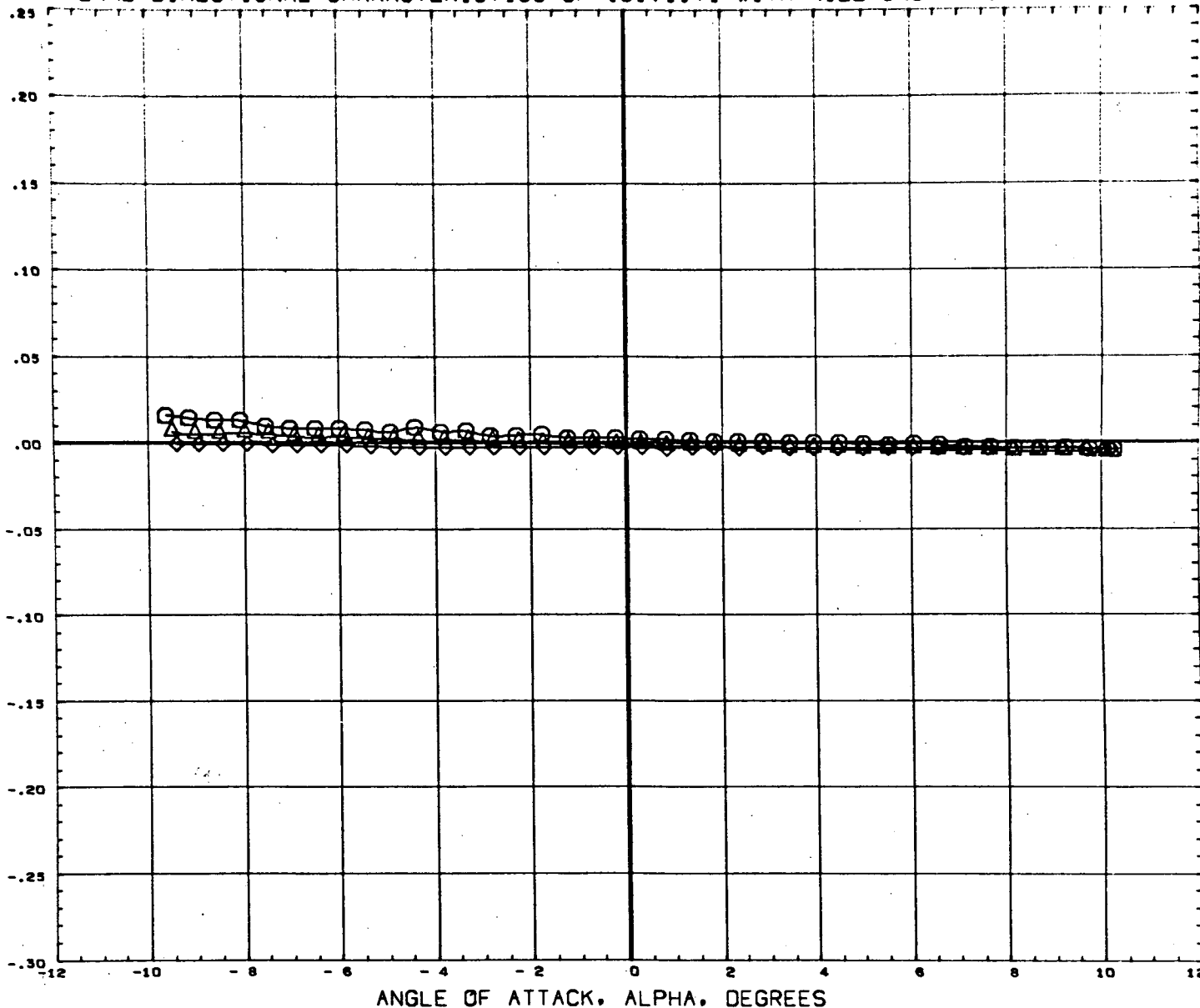
REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(RD74B7) 25 APR 72 PAGE 380

# LATERAL-DIRECTIONAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ. FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

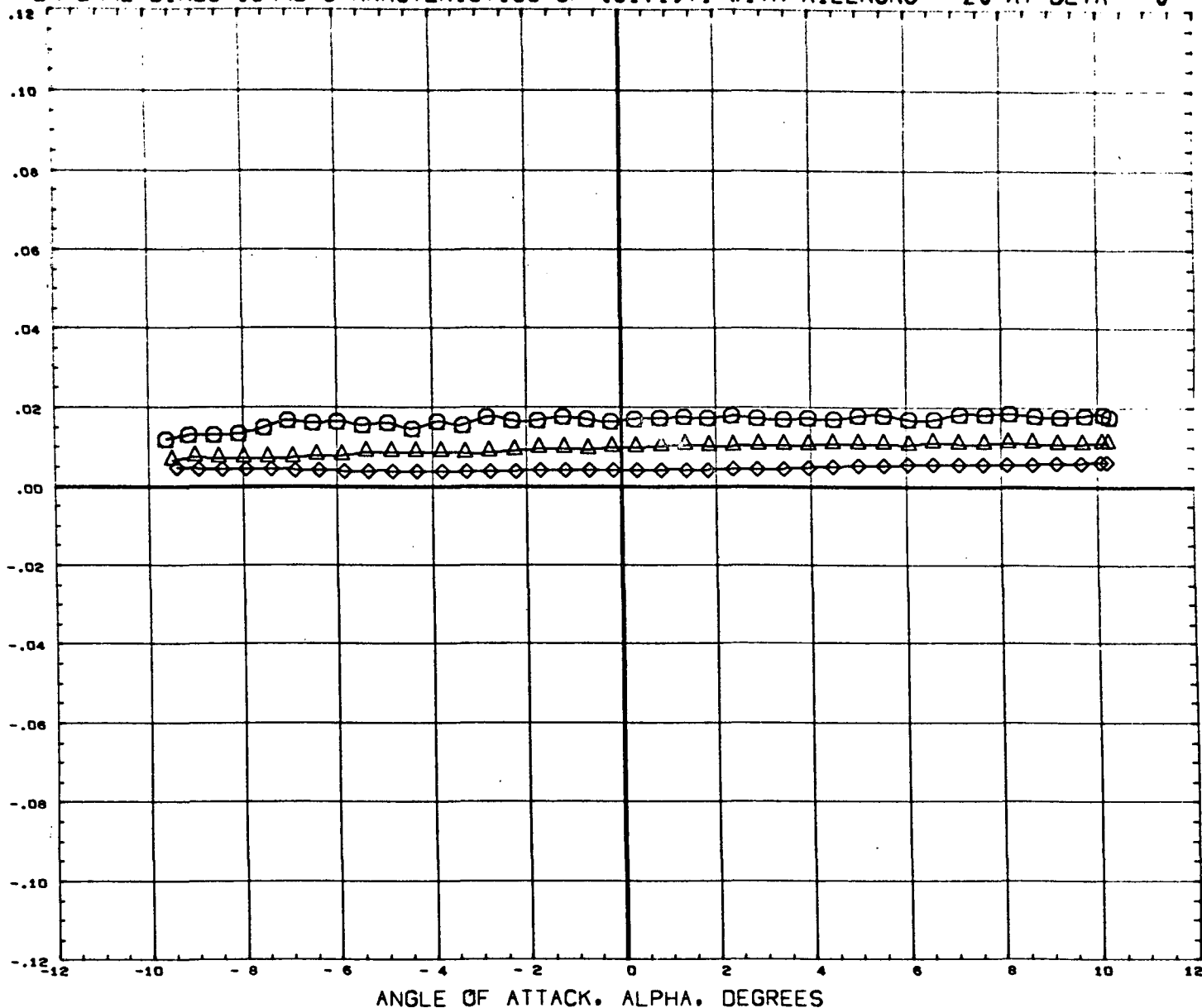
REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(RD74B7) 25 APR 72 PAGE 381

# LATERAL-DIRECTIONAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT BETA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

REFERENCE FILE

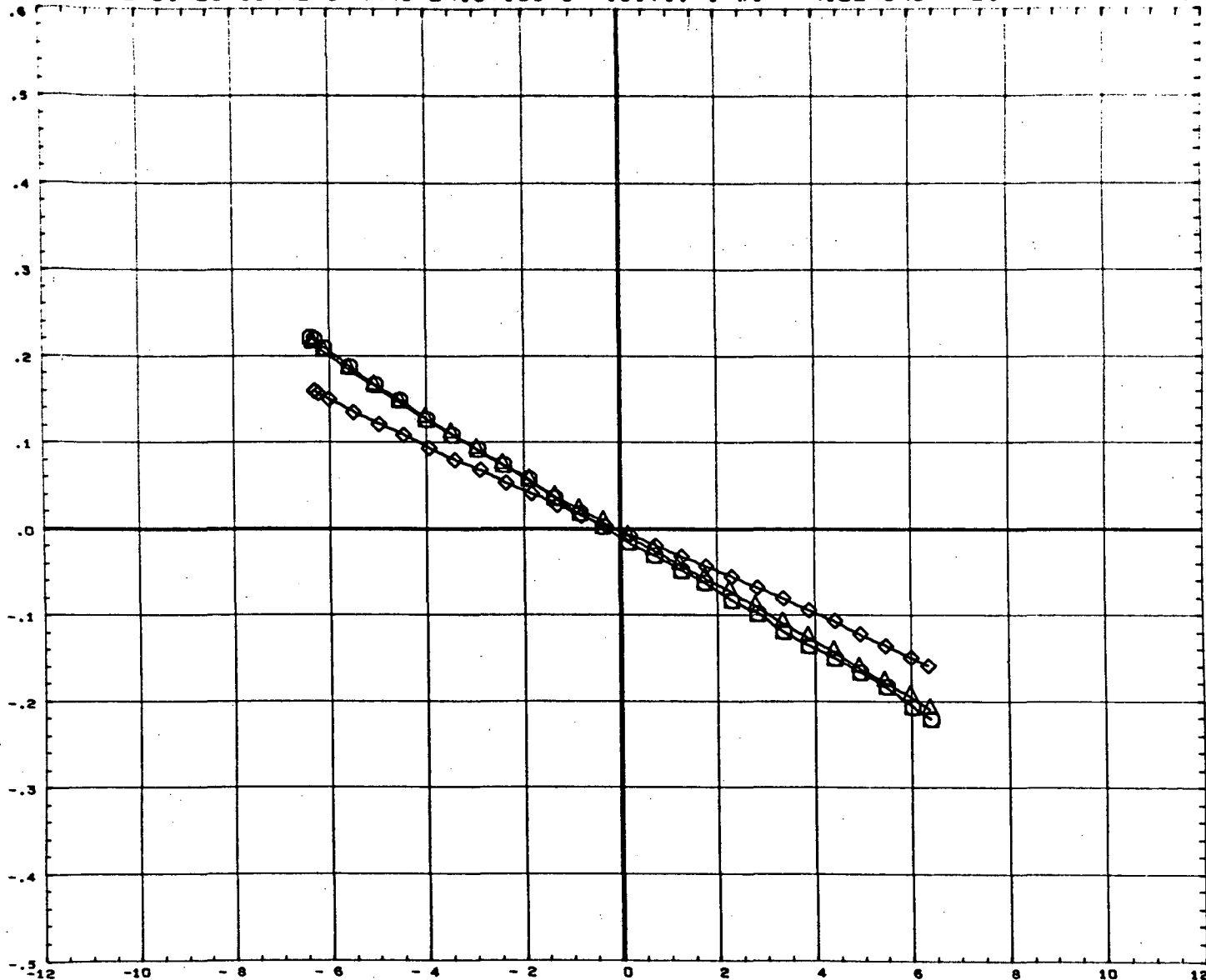
MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(RD74B7) 25 APR 72 PAGE 382



# LATERAL-DIRECTIONAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT ALPHA = 0

LATERAL FORCE COEFFICIENT, CY



SIDE SLIP ANGLE, BETA, DEGREES

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SO.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

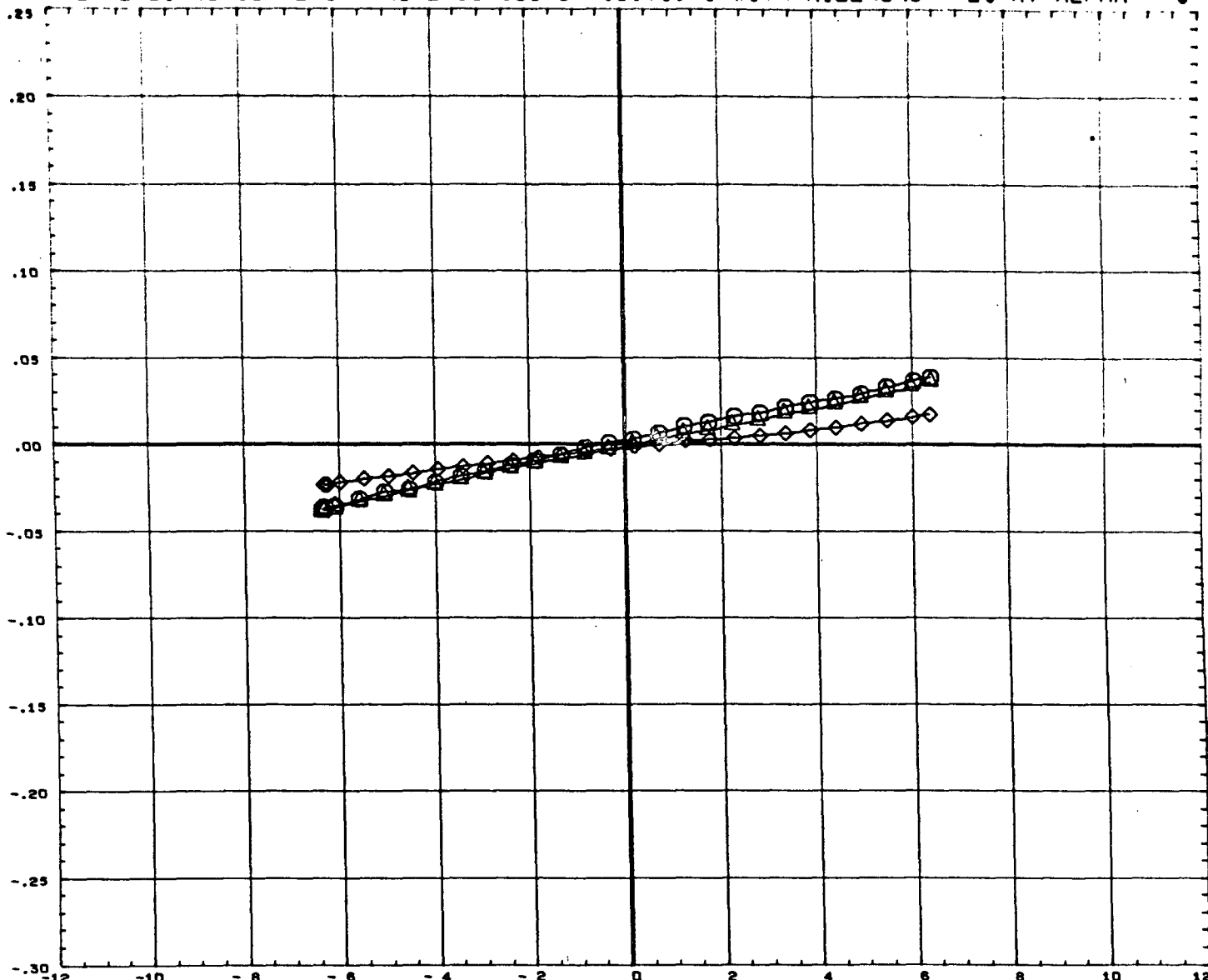
REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(RD74B8) 25 APR 72 PAGE 383

# LATERAL-DIRECTIONAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT ALPHA = 0

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

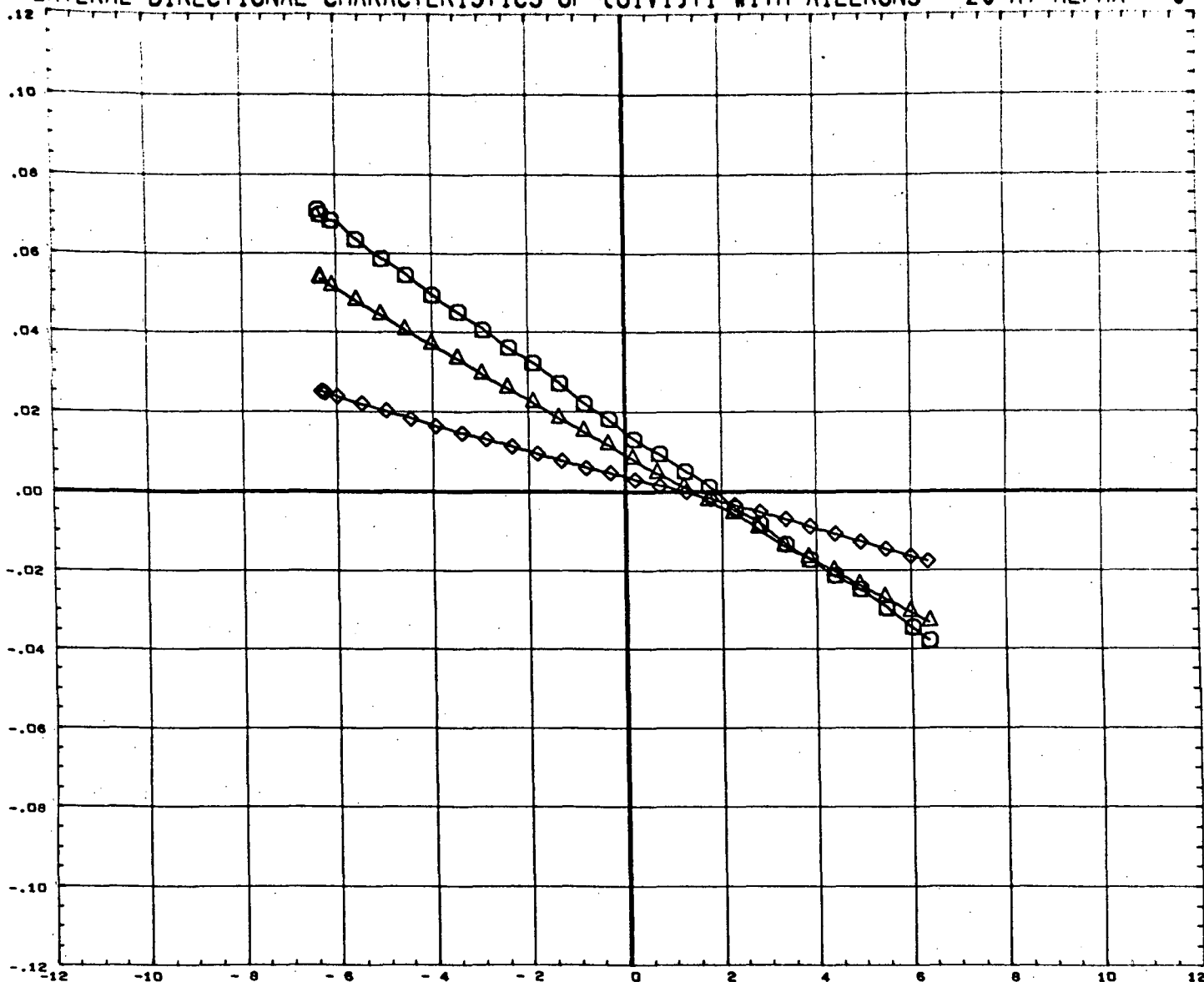
REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(RD74B8) 25 APR 72 PAGE 384

# LATERAL-DIRECTIONAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT ALPHA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

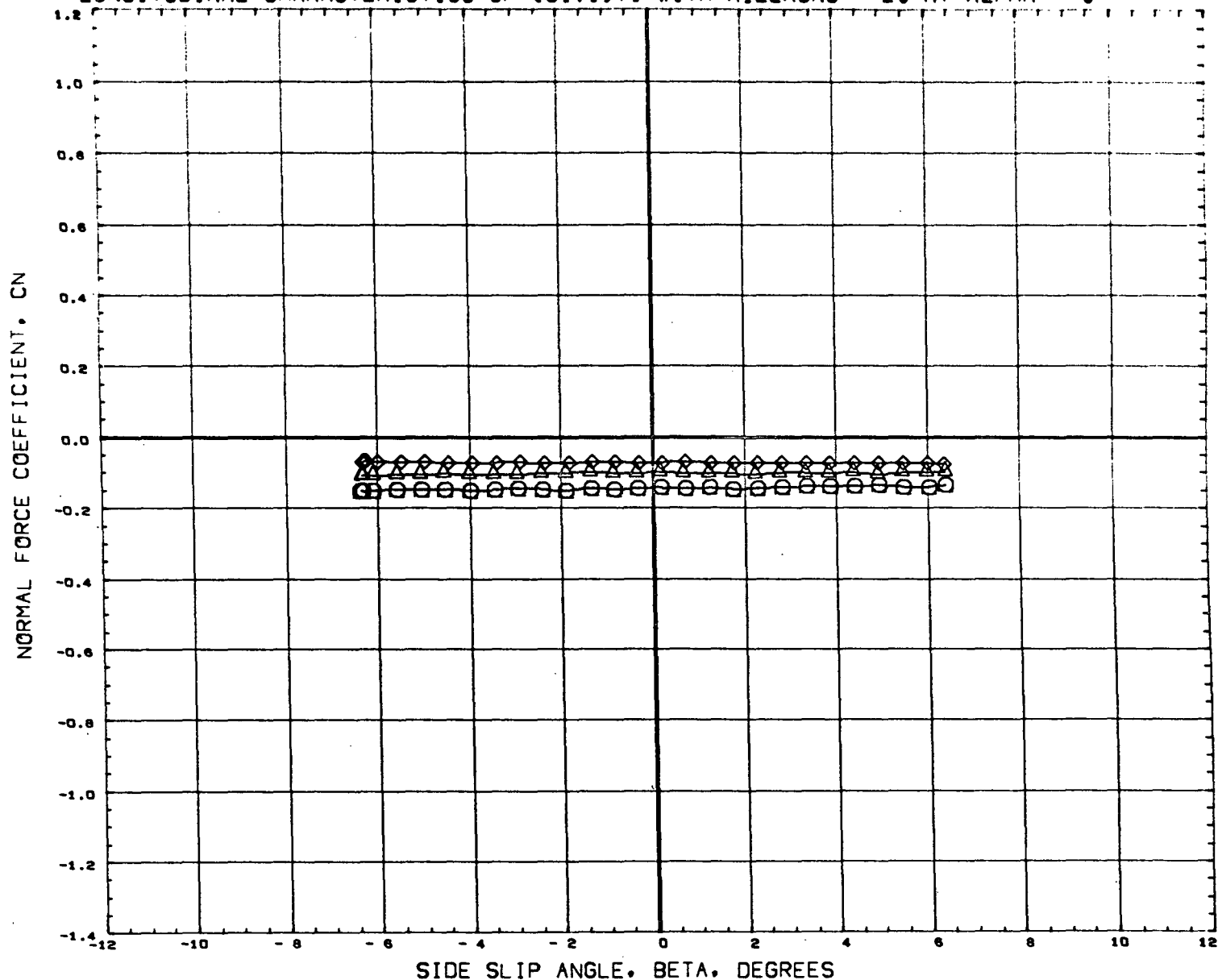
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XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	SCALE

REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(RD7488) 25 APR 72 PAGE 385

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT ALPHA = 0



SYMBOL	MACH	PARAMETRIC VALUES
○	1.507	ALPHA 0.000 AILERON 20.000
△	2.203	ELEVTR 0.000 RUDDER 0.000
◇	4.469	

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0080	SCALE

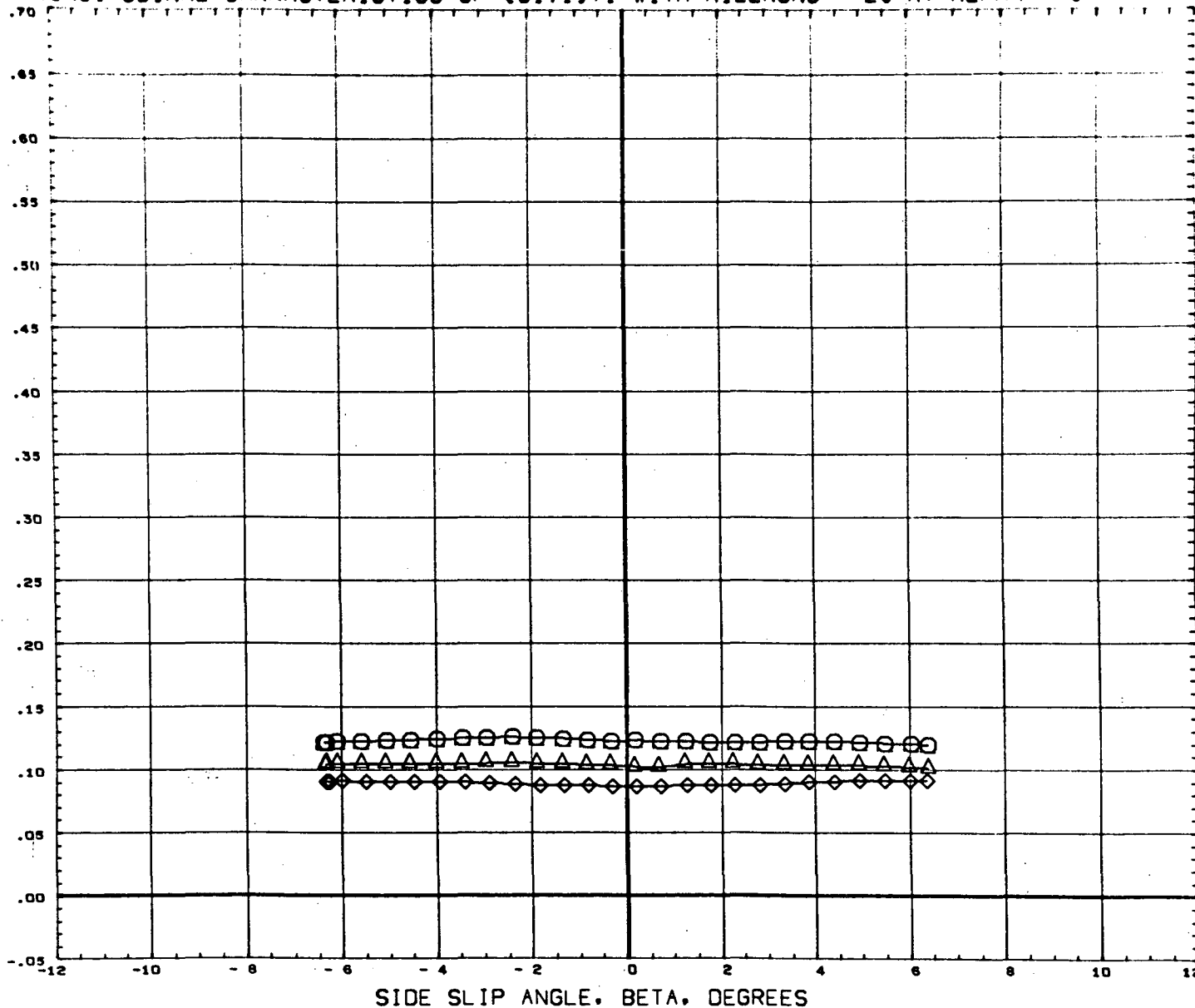
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD7488) 12 SEP 72 PAGE 386

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT ALPHA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

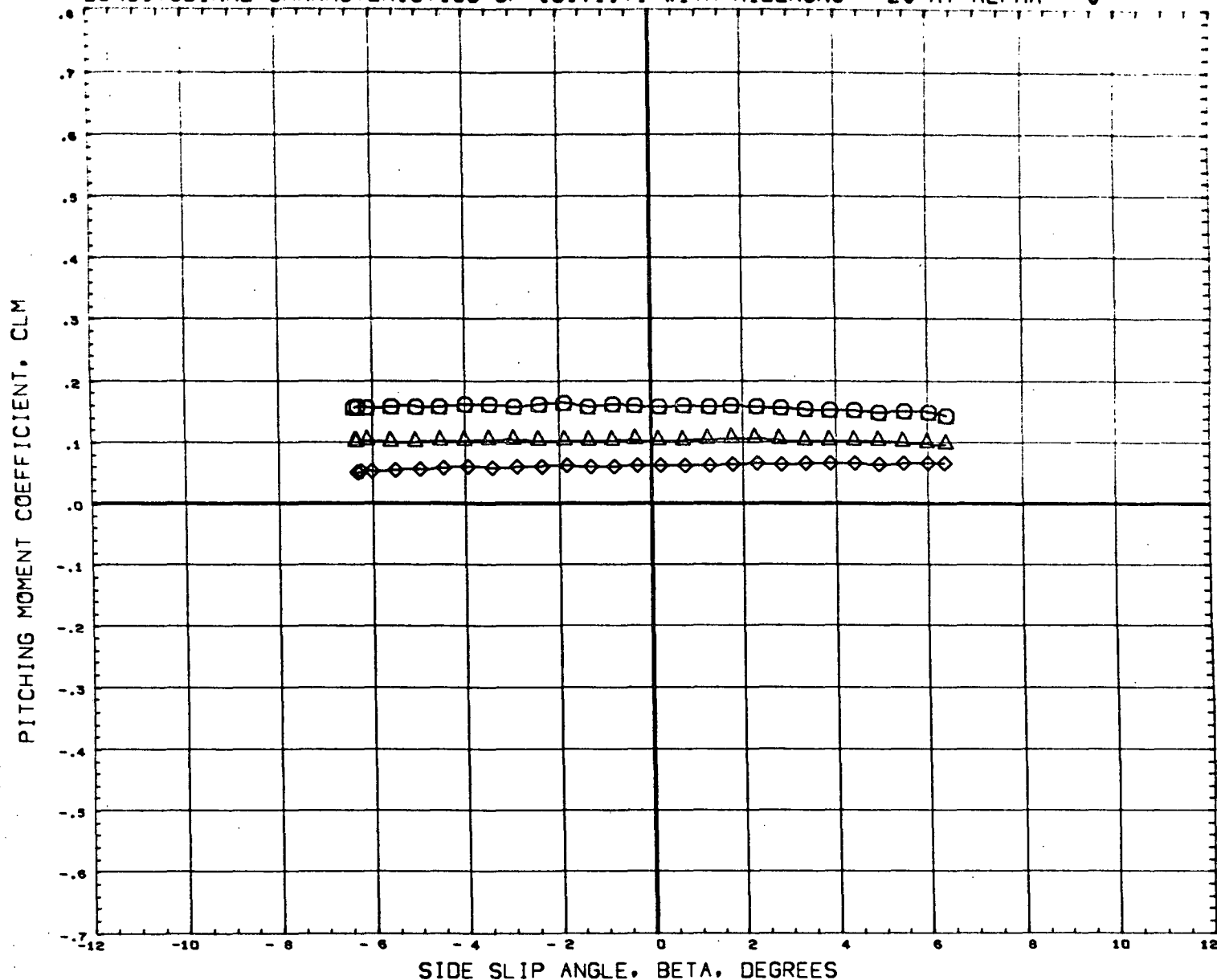
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LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD7488) 12 SEP 72 PAGE 387

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT ALPHA = 0



SYMBOL	MACH	PARAMETRIC VALUES
○	1.507	ALPHA 0.000 AILRON 20.000
△	2.203	ELEVTR 0.000 RUDDER 0.000
◇	4.469	

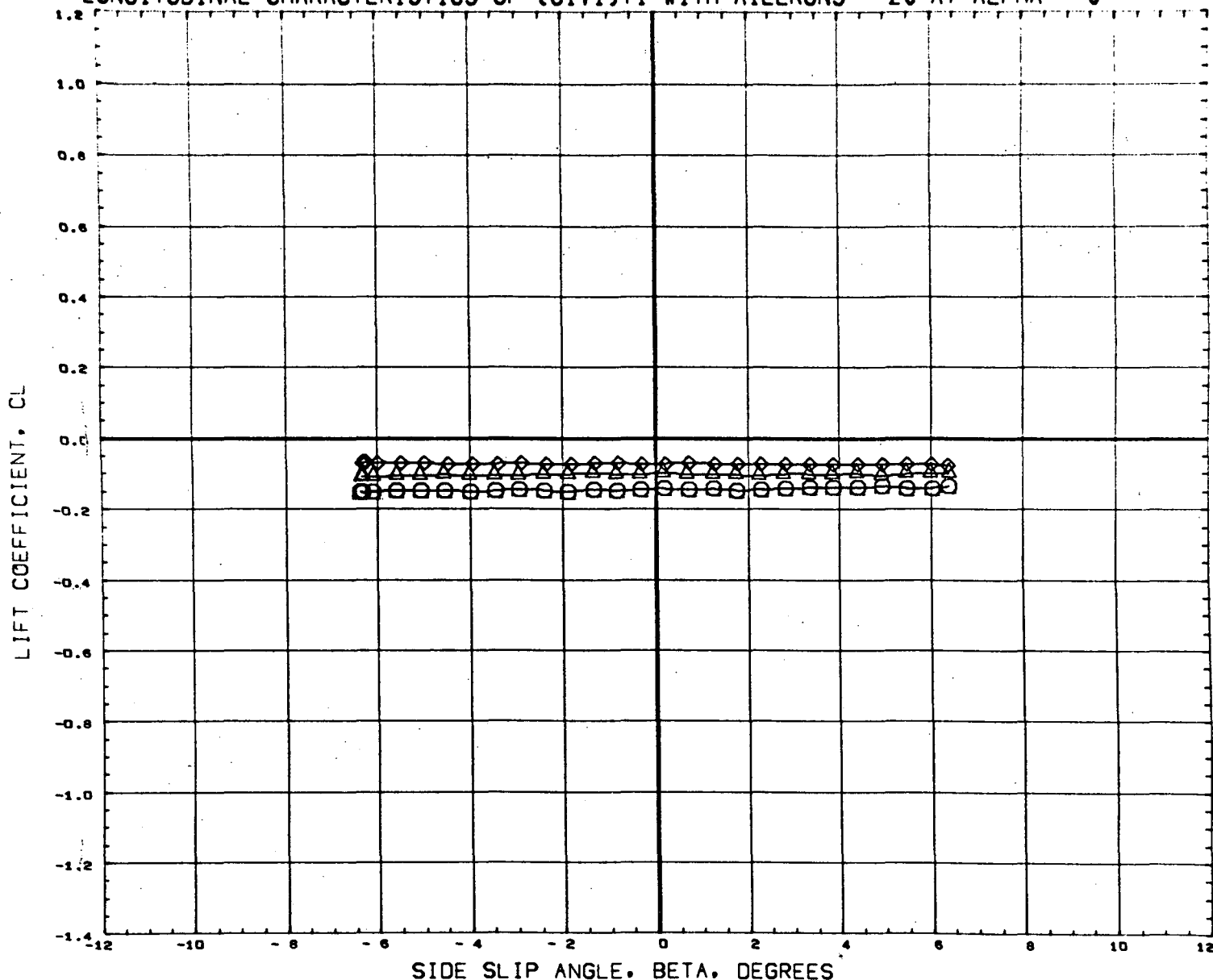
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BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD7488) 12 SEP 72 PAGE 388

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT ALPHA = 0



SYMBOL	MACH	PARAMETRIC VALUES
○	1.507	ALPHA 0.000 AILRON 20.000
△	2.203	ELEVTR 0.000 RUDDER 0.000
◇	4.469	

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	SCALE

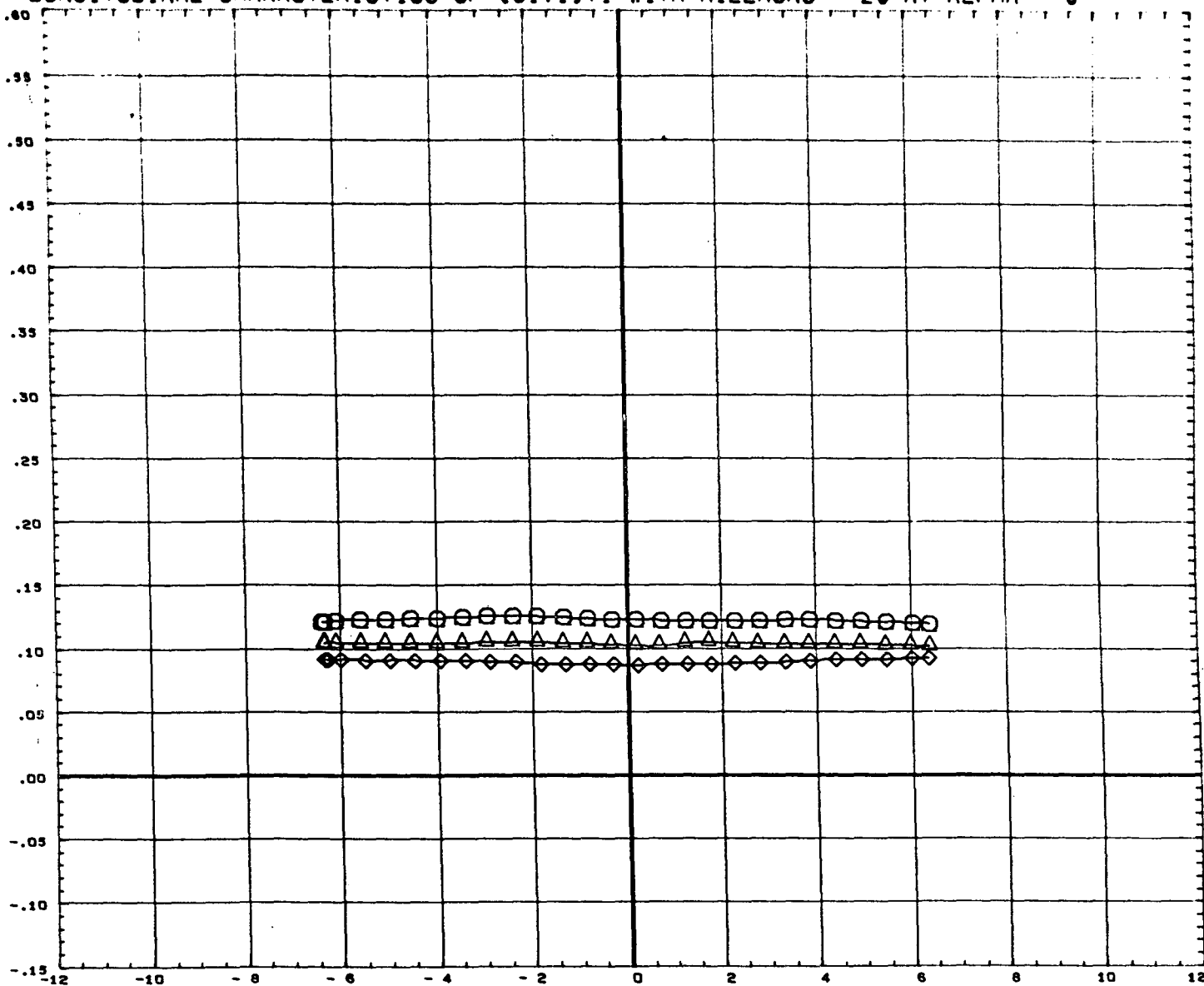
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD7488) 12 SEP 72 PAGE 389

# LONGITUDINAL CHARACTERISTICS OF (01V1)T1 WITH AILERONS = 20 AT ALPHA = 0

FOREBODY DRAG COEFFICIENT, CDF



SIDE SLIP ANGLE, BETA, DEGREES

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	20.000
△	2.203	ELEVTR	0.000	RUDDER	0.000
◇	4.469				

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMHP	557.0004	IN.
YMHP	0.0000	IN.
ZMHP	200.0004	IN.
SCALE	0.0060	SCALE

DATA HIST. CODE TV

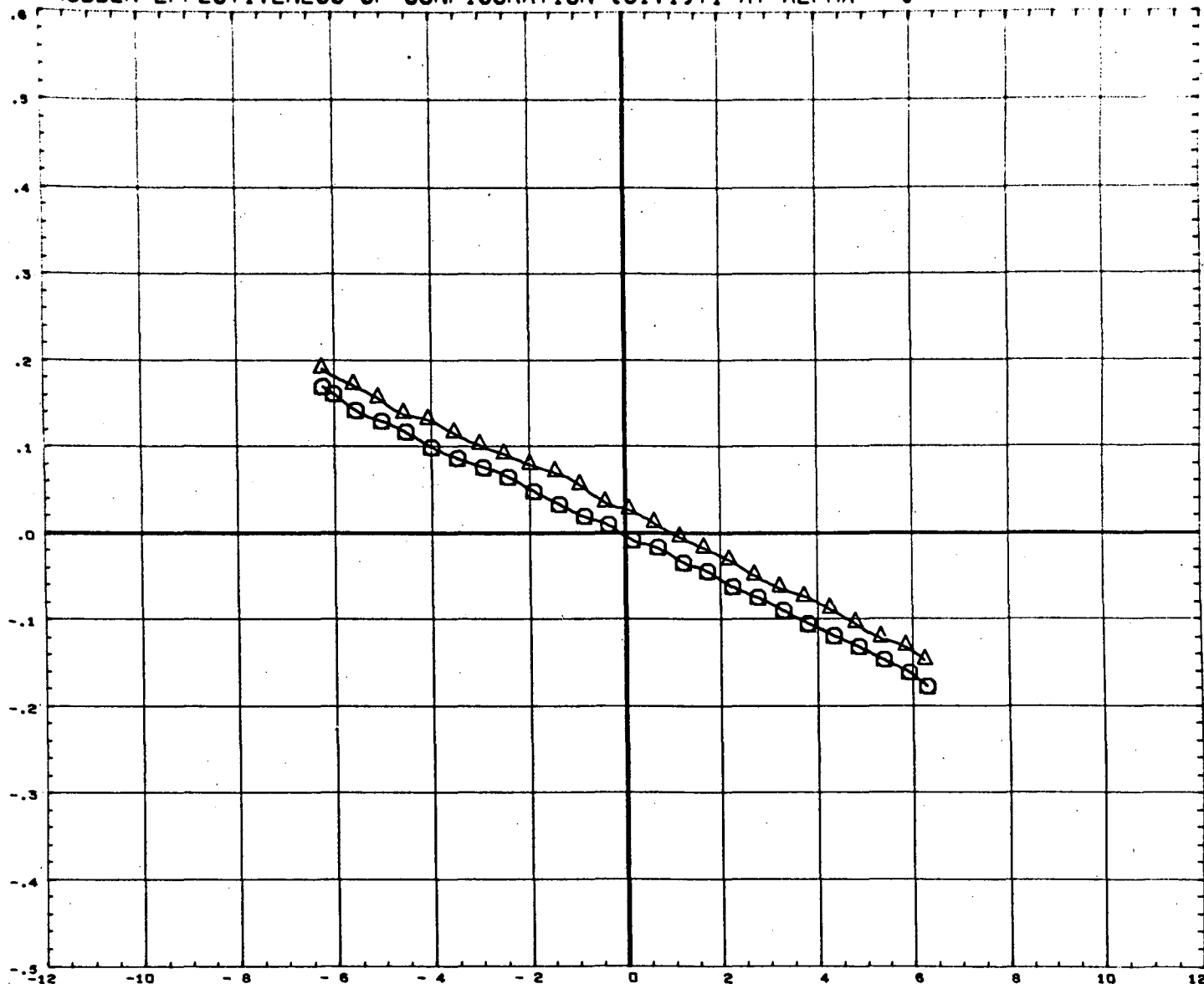
MDAC S-222 COMPOSITE(T-CG) (01V1)T1

(CD74B8) 12 SEP 72 PAGE 390




# RUDDER EFFECTIVENESS OF CONFIGURATION (O1V1)T1 AT ALPHA = 0


LATERAL FORCE COEFFICIENT, CY



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442)  MDAC S-222 COMPOSITE (T-CG) (O1V1) T1

(RD7446)  MDAC S-222 COMPOSITE (T-CG) (O1V1) T1

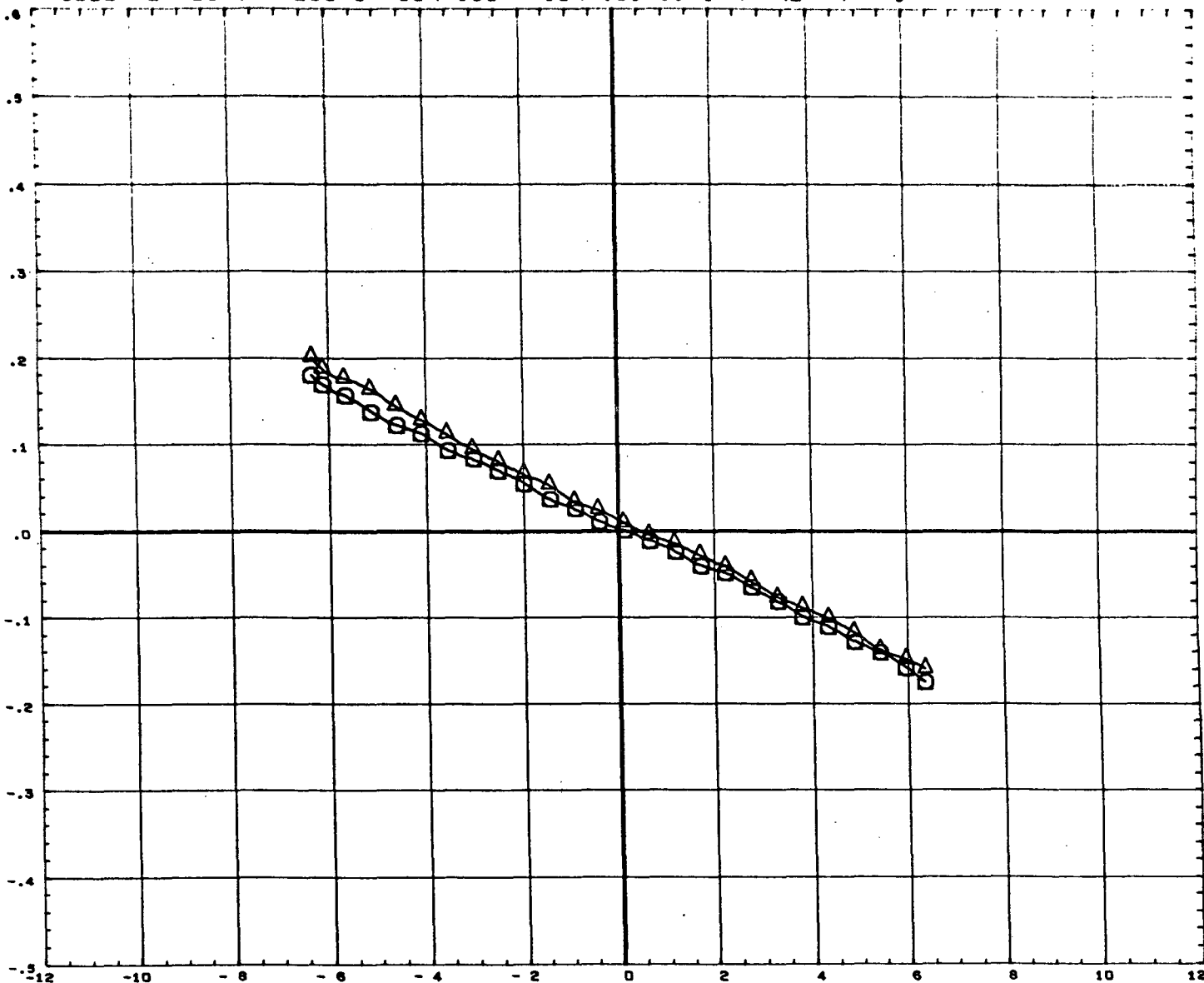
ALPHA	ELEVTR	ATLRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	10.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .60

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# RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

LATERAL FORCE COEFFICIENT, CY



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442) ○ MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
(RD7446) Δ MDAC S-222 COMPOSITE (T-CG) (01V1)T1

ALPHA ELEVTR AILRON RUDDER  
0.000 0.000 0.000 0.000  
0.000 0.000 0.000 10.000

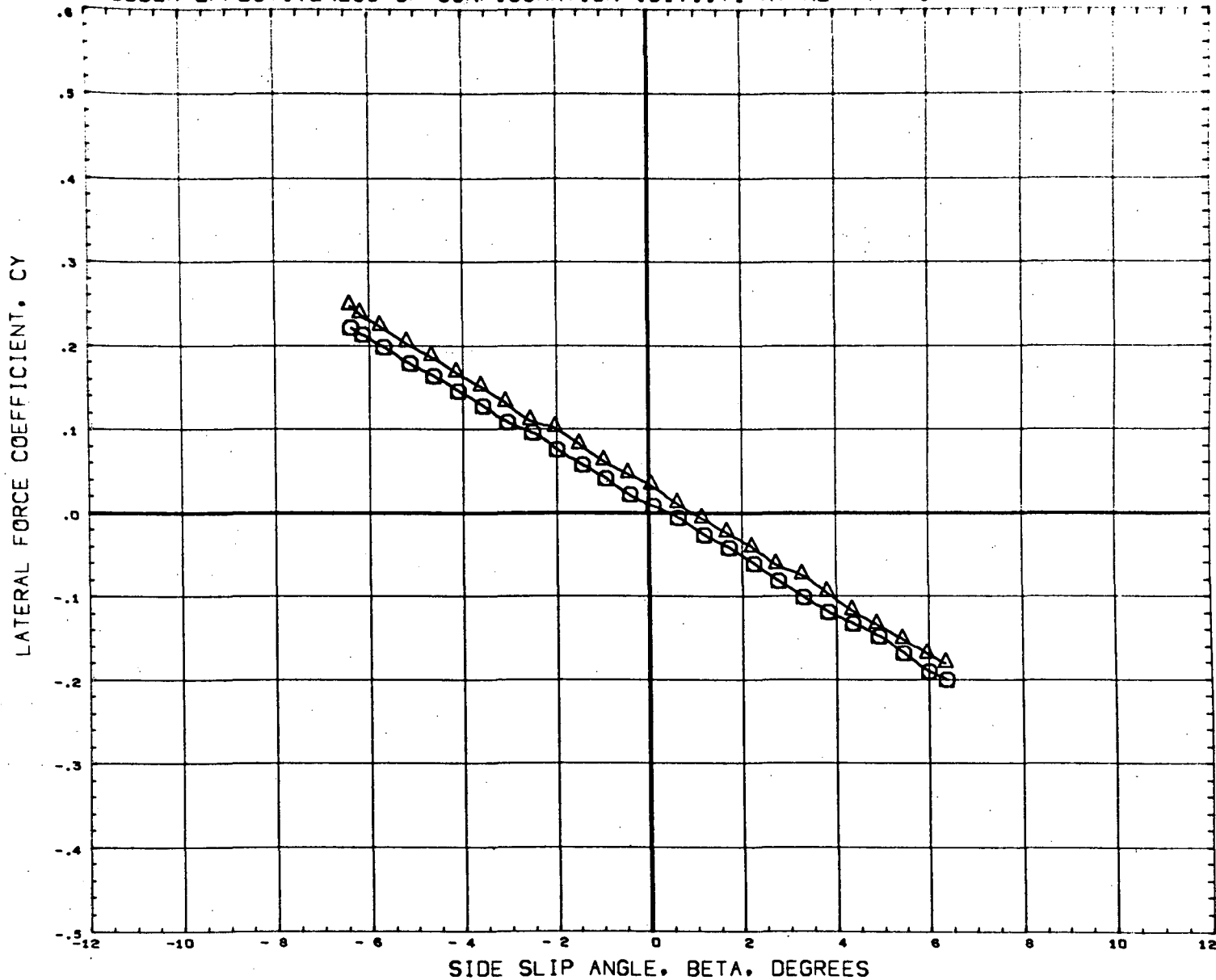
REFERENCE INFORMATION  
SREF 3155.3040 SQ.FT.  
LREF 609.5004 IN.  
BREF 882.0004 IN.  
XMRP 557.0004 IN.  
YMRP 0.0000 IN.  
ZMRP 200.0004 IN.  
SCALE 0.0060

MACH

.90

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# RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

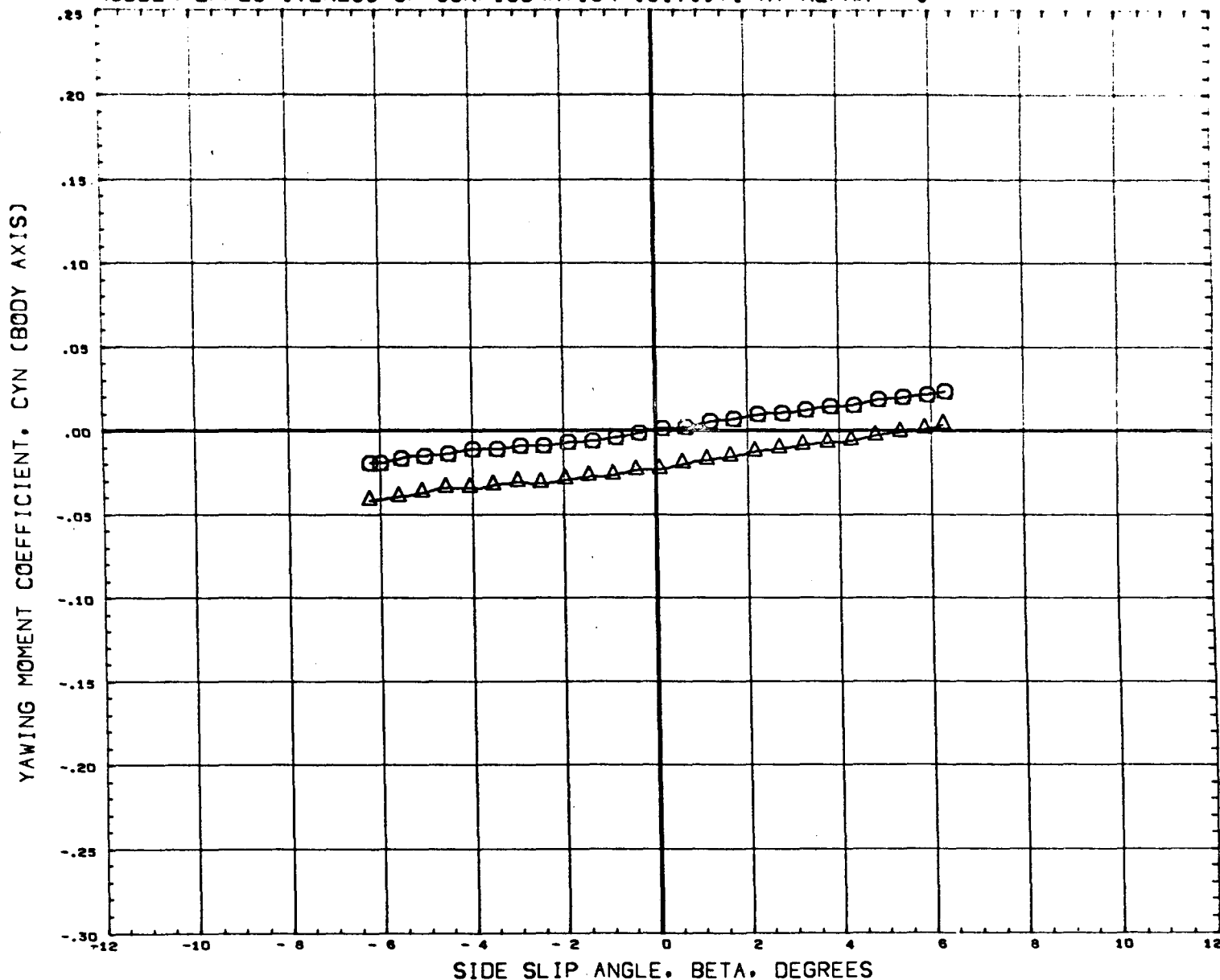


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7442)	NDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7446)	NDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.10

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# RUDDER EFFECTIVENESS OF CONFIGURATION (O1V1)T1 AT ALPHA = 0

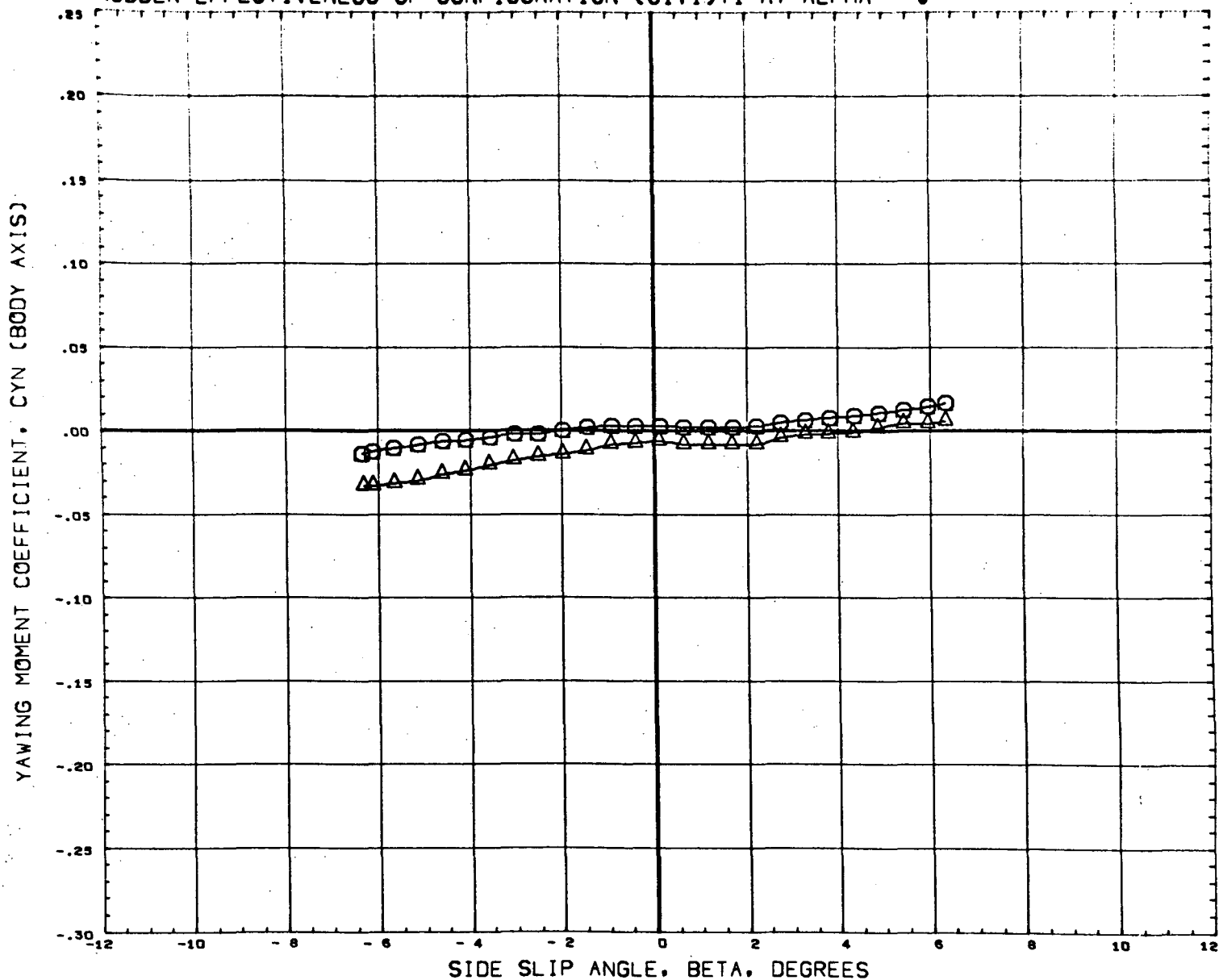


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7442)	MDAC S-222 COMPOSITE (T-CG) (O1V1) T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7446)	MDAC S-222 COMPOSITE (T-CG) (O1V1) T1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060


MACH .60


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# RUDDER EFFECTIVENESS OF CONFIGURATION (O1V1)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442)  MDAC S-222 COMPOSITE (T-CG) (O1V1) T1

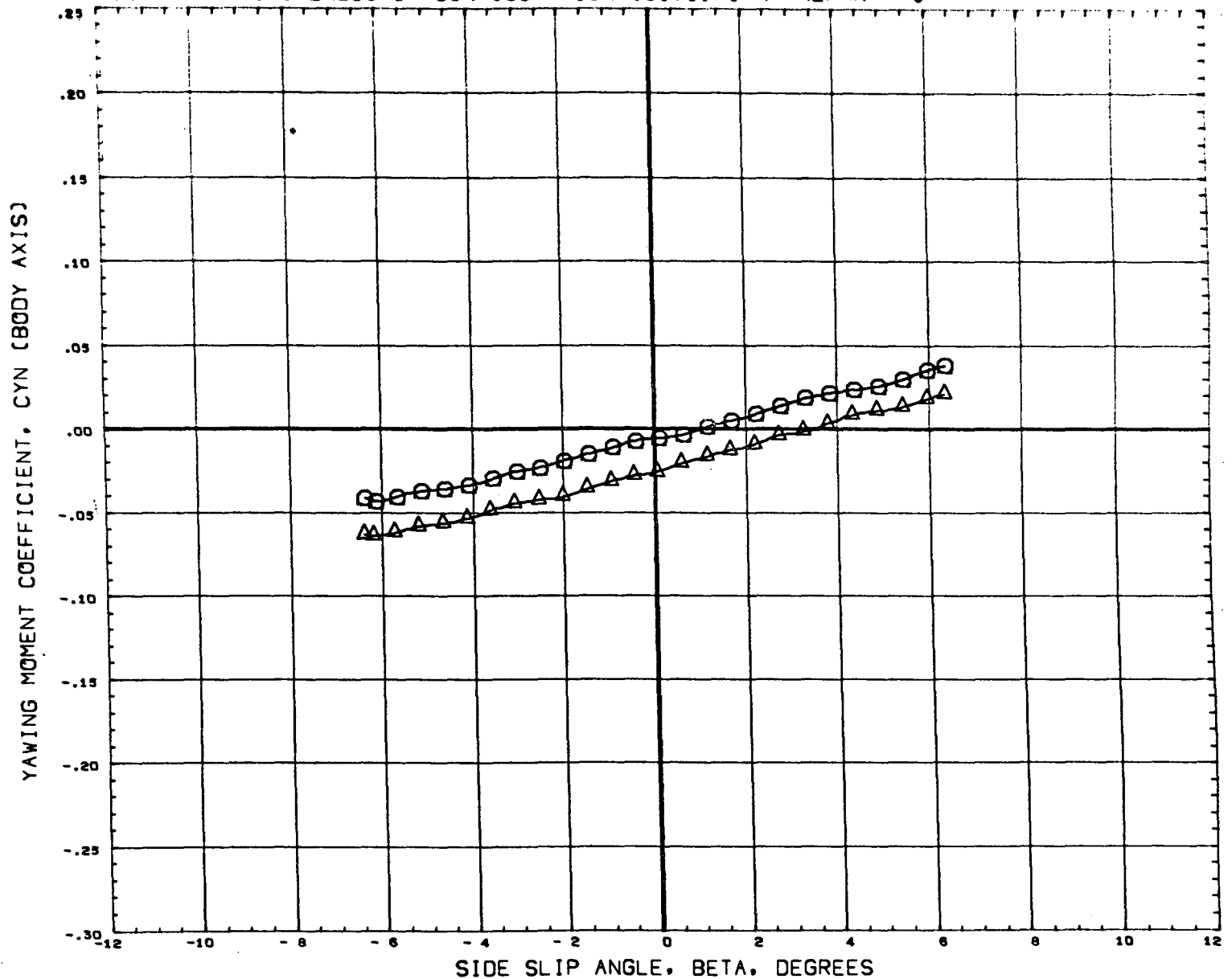
(RD7446)  MDAC S-222 COMPOSITE (T-CG) (O1V1) T1

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
0.000	0.000	0.000	10.000	LREF	609.5004	IN.
				BREF	882.0004	IN.
				XMRP	557.0004	IN.
				YMRP	0.0000	IN.
				ZMRP	200.0004	IN.
				SCALE	0.0060	

MACH .90

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# RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

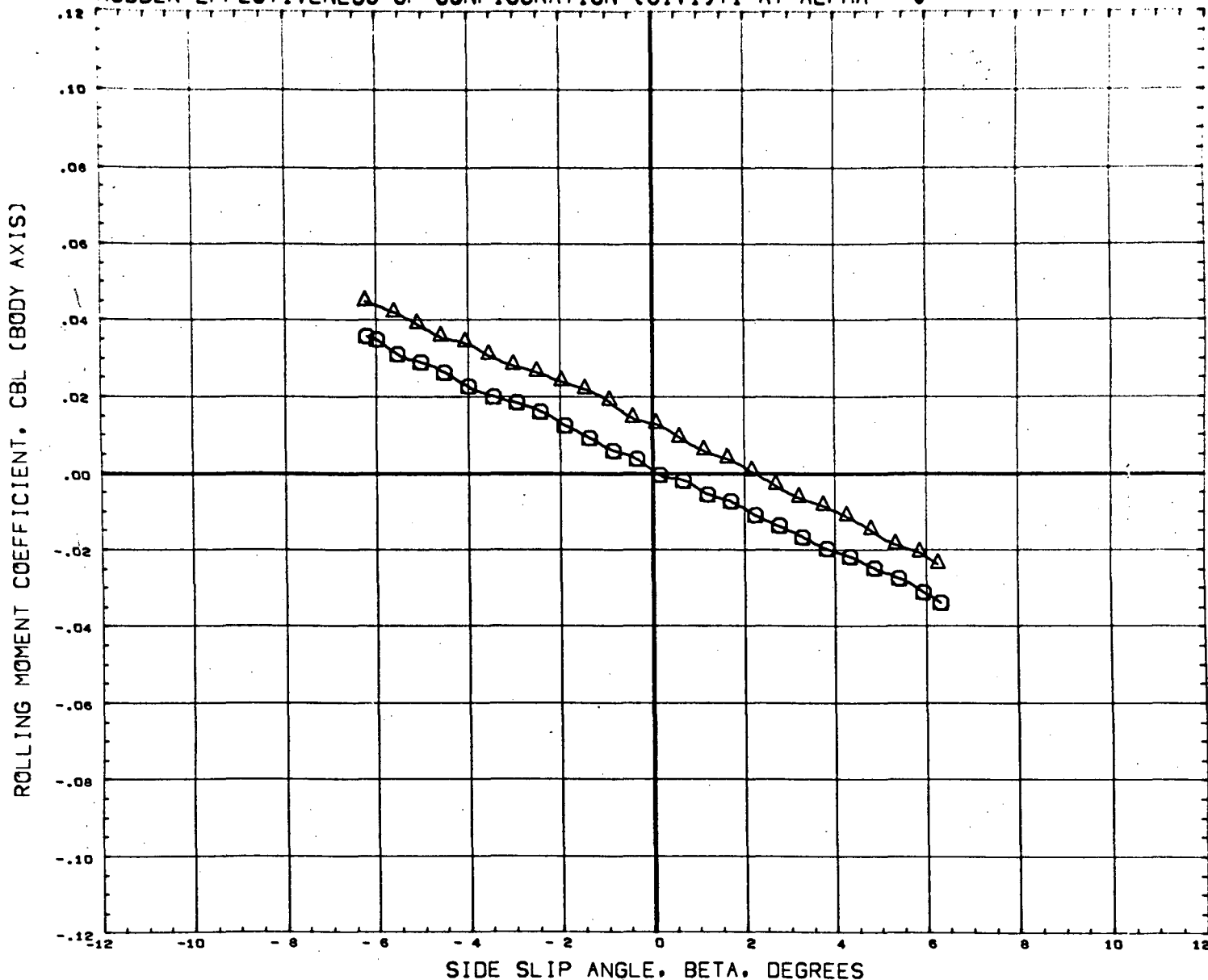


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7442)	○	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7446)	△	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
							BREF	882.0004 IN.
							XMRP	557.0004 IN.
							YMRP	0.0000 IN.
							ZMRP	200.0004 IN.
							SCALE	0.0080

MACH 1.10

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# RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RD7442)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1
(RD7446)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1

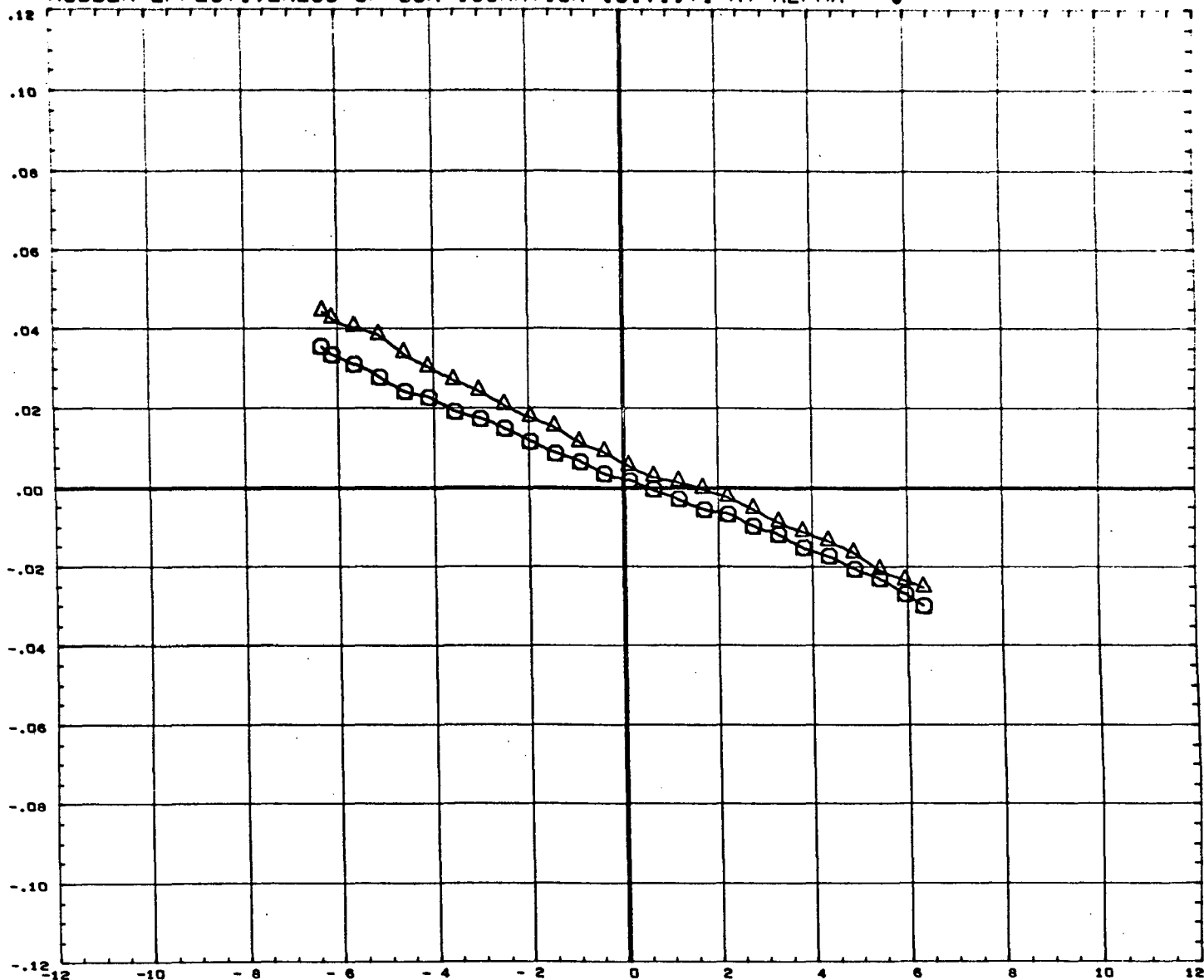
ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION
0.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
0.000	0.000	0.000	10.000	LREF 609.5004 IN.
				BREF 882.0004 IN.
				XMRP 557.0004 IN.
				YMRP 0.0000 IN.
				ZMRP 200.0004 IN.
				SCALE 0.0060

MACH .60

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
# RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442)  MDAC S-222 COMPOSITE (T-CG) (01V1) T1  
(RD7446)  MDAC S-222 COMPOSITE (T-CG) (01V1) T1

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	10.000

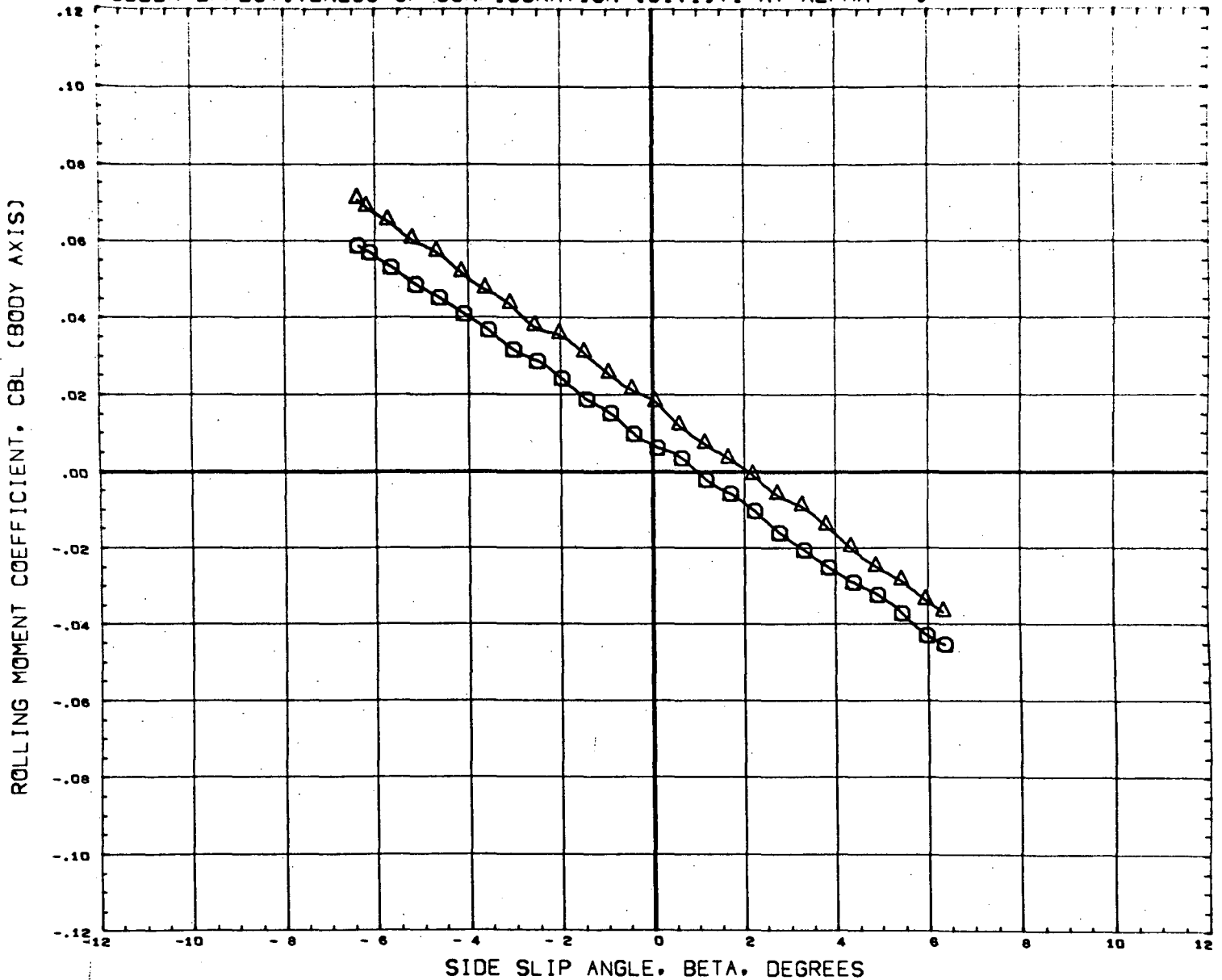
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRR	557.0004	IN.
YMRR	0.0000	IN.
ZMRR	200.0004	IN.
SCALE	0.0060	

MACH .90


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# RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442)  MDAC S-222 COMPOSITE (T-CG) (01V1)T1

(RD7446)  MDAC S-222 COMPOSITE (T-CG) (01V1)T1

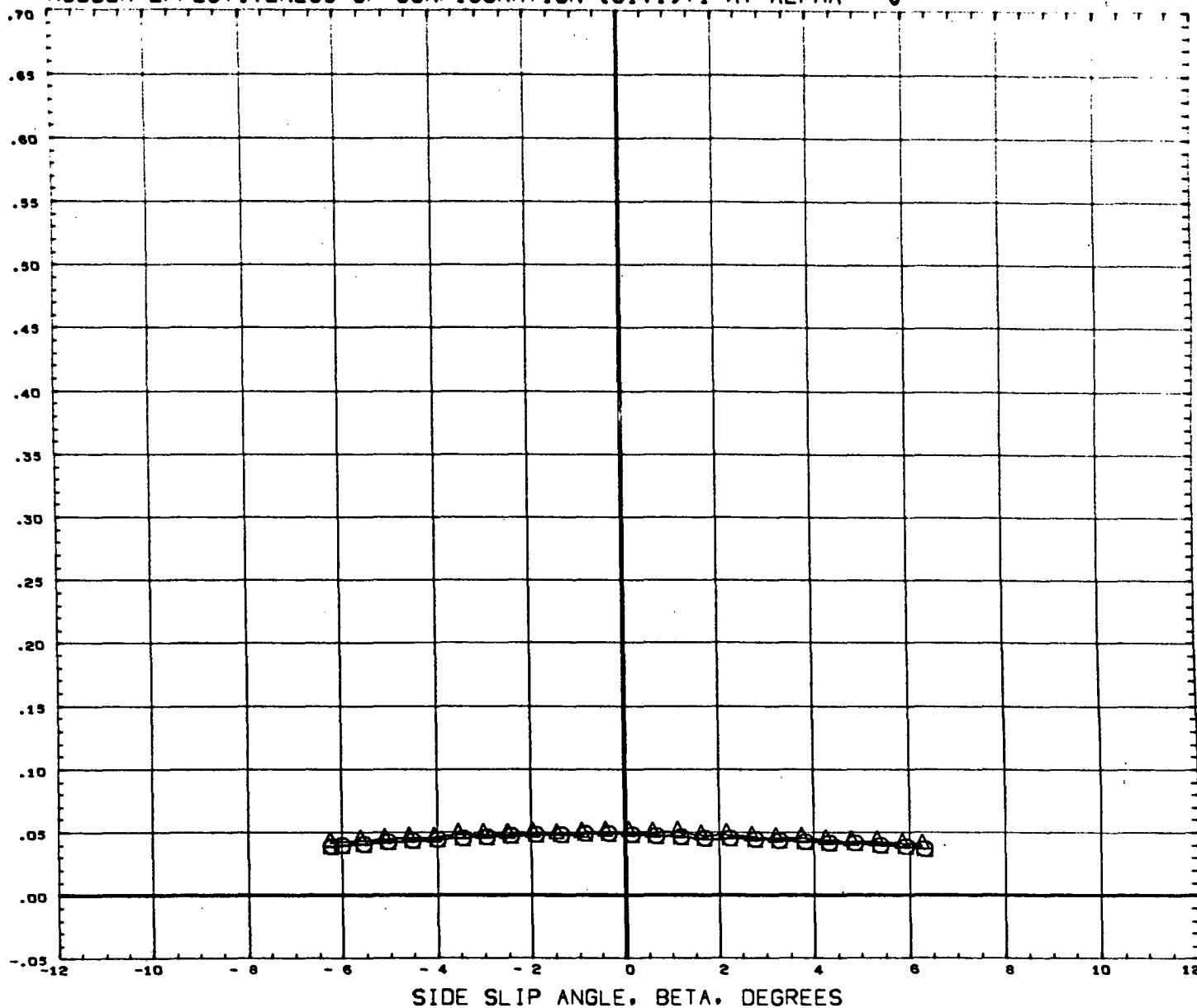
ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
0.000	0.000	0.000	10.000	LREF	609.5004	IN.
				BREF	882.0004	IN.
				XMRF	557.0004	IN.
				YMRF	0.0000	IN.
				ZMRF	200.0004	IN.
				SCALE	0.0060	

MACH 1.10

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# RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



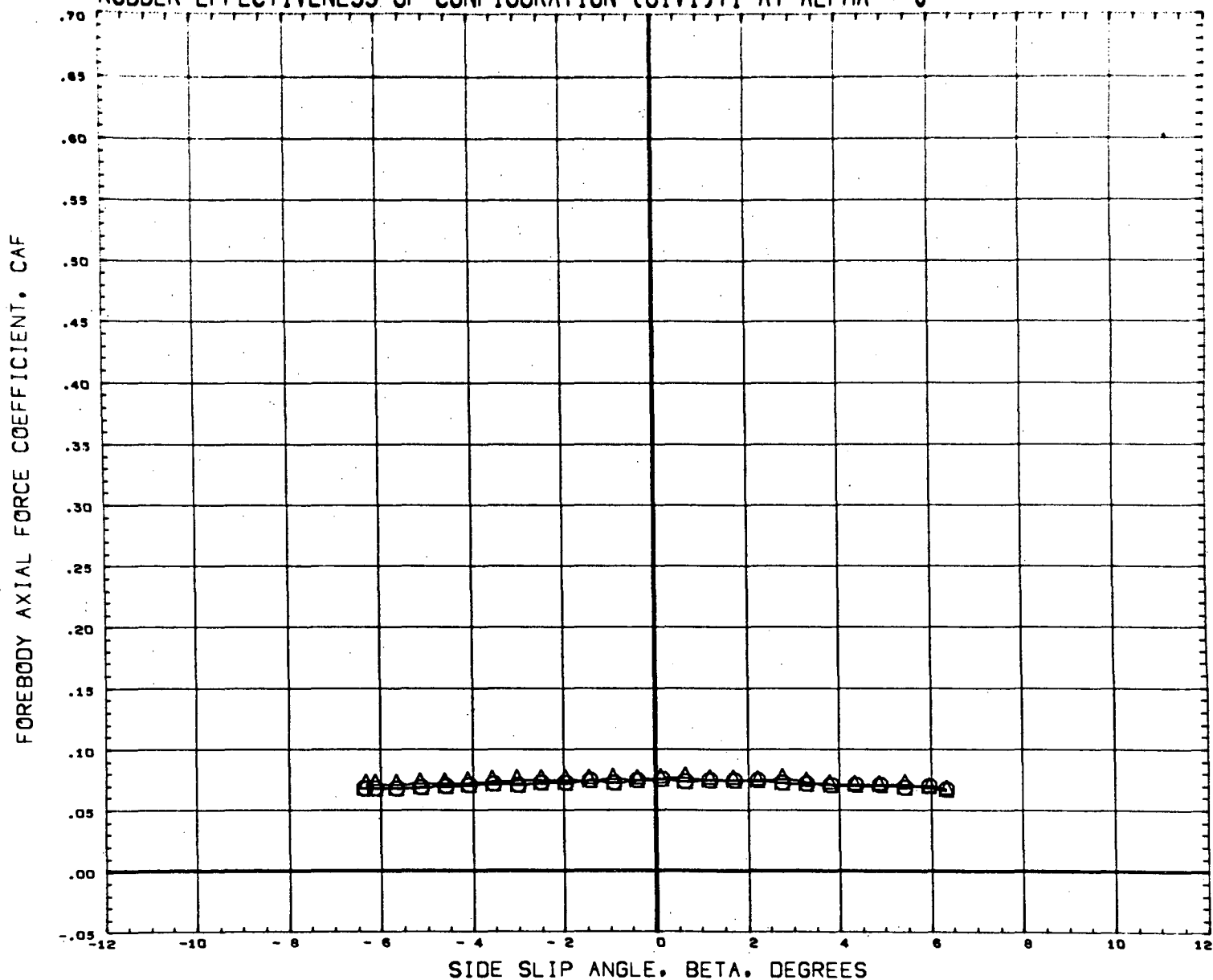
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RD7442)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1
(RD7446)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3153.3040 SQ.FT.
0.000	0.000	0.000	10.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060



MACH .60

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# RUDDER EFFECTIVENESS OF CONFIGURATION (O1V1)T1 AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7442)  MDAC S-222 COMPOSITE (T-CG) (O1V1)T1  
 (RD7446)  MDAC S-222 COMPOSITE (T-CG) (O1V1)T1

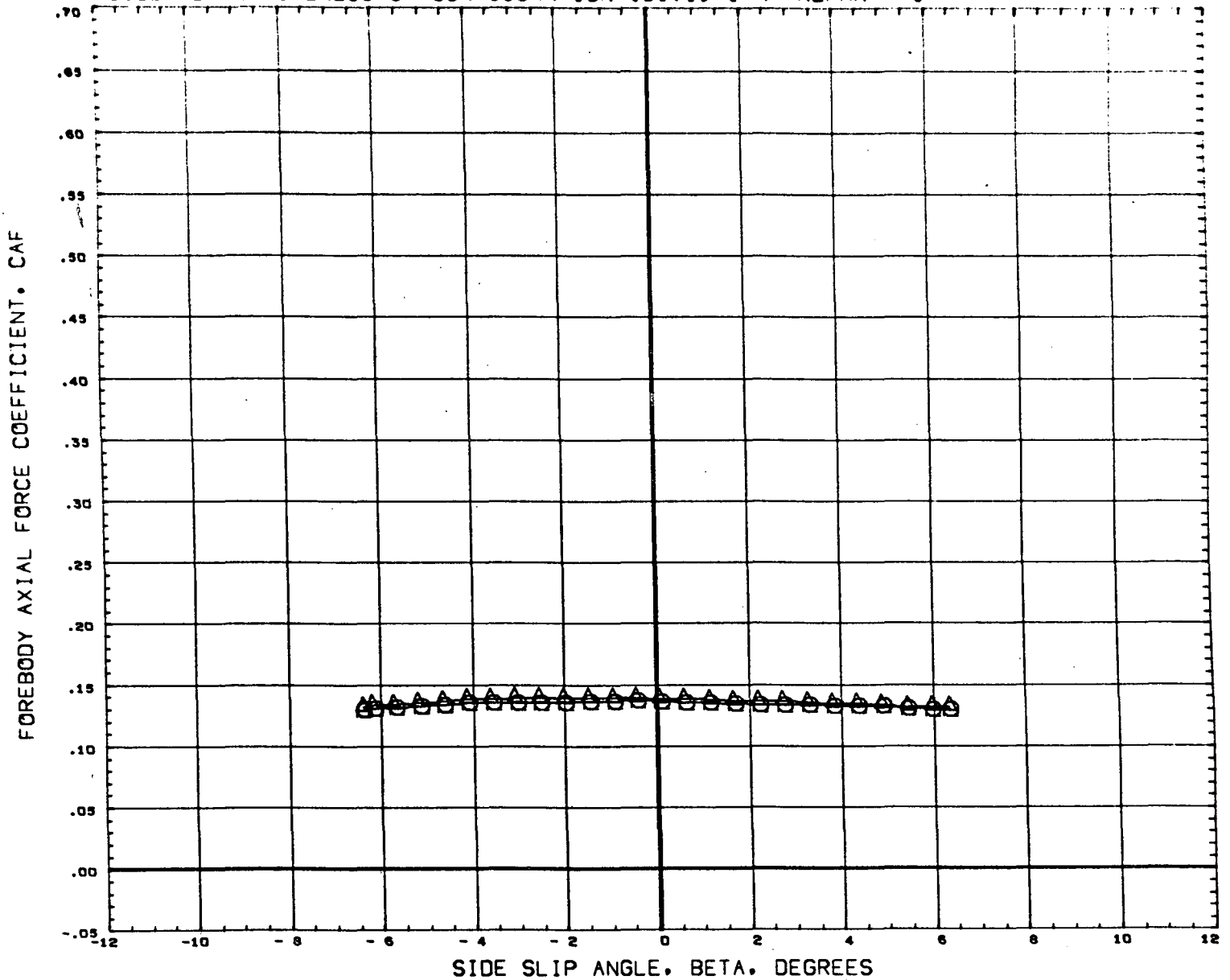
ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	10.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

MACH .90

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# RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT ALPHA = 0



DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
(RD7442)    MDAC S-222 COMPOSITE(T-CG) (01V1)T1  
(RD7446)    MDAC S-222 COMPOSITE(T-CG) (01V1)T1

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	10.000

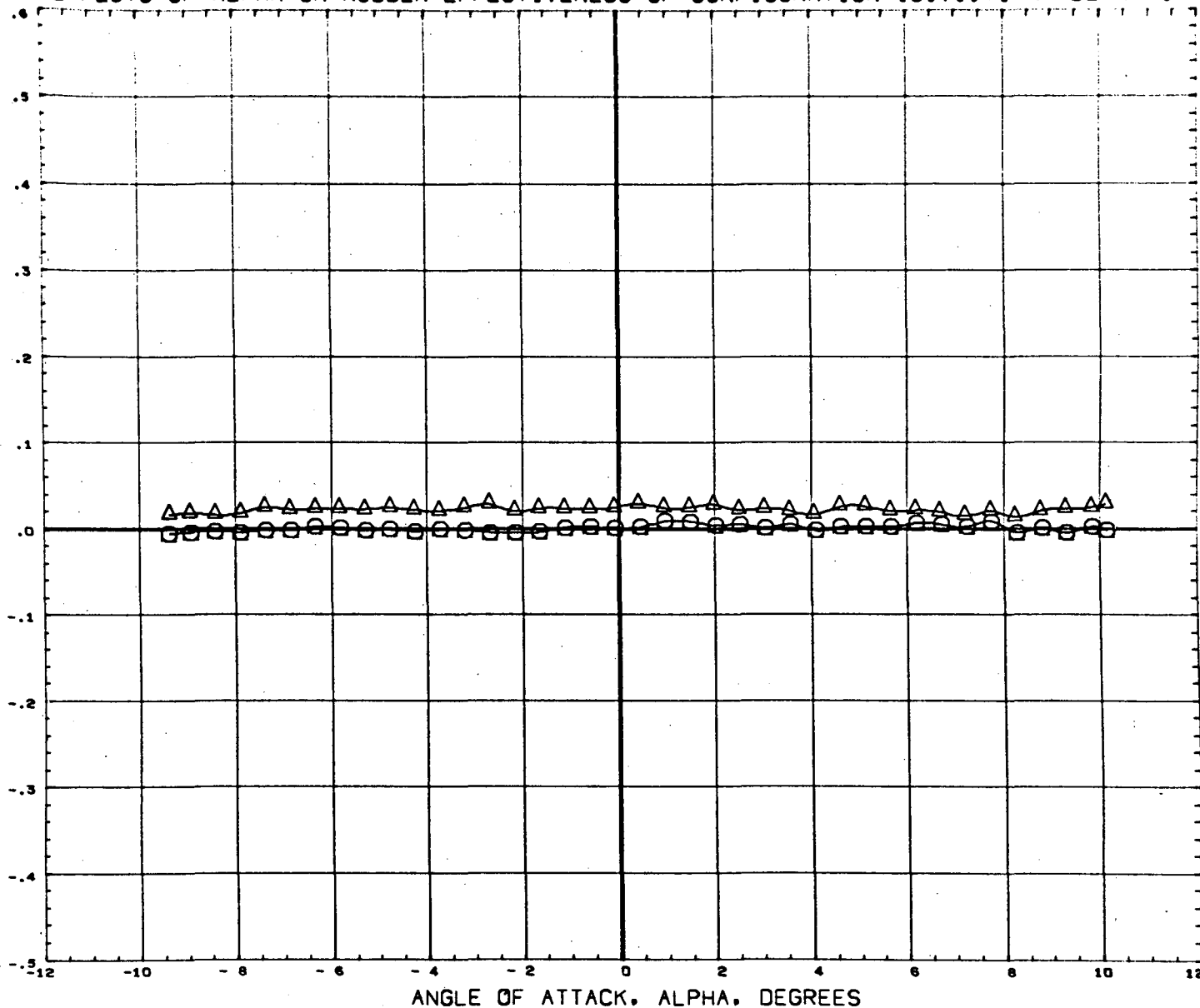
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH            1.10



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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0

LATERAL FORCE COEFFICIENT, CY



DATA SET SYMBOL CONFIGURATION DESCRIPTION

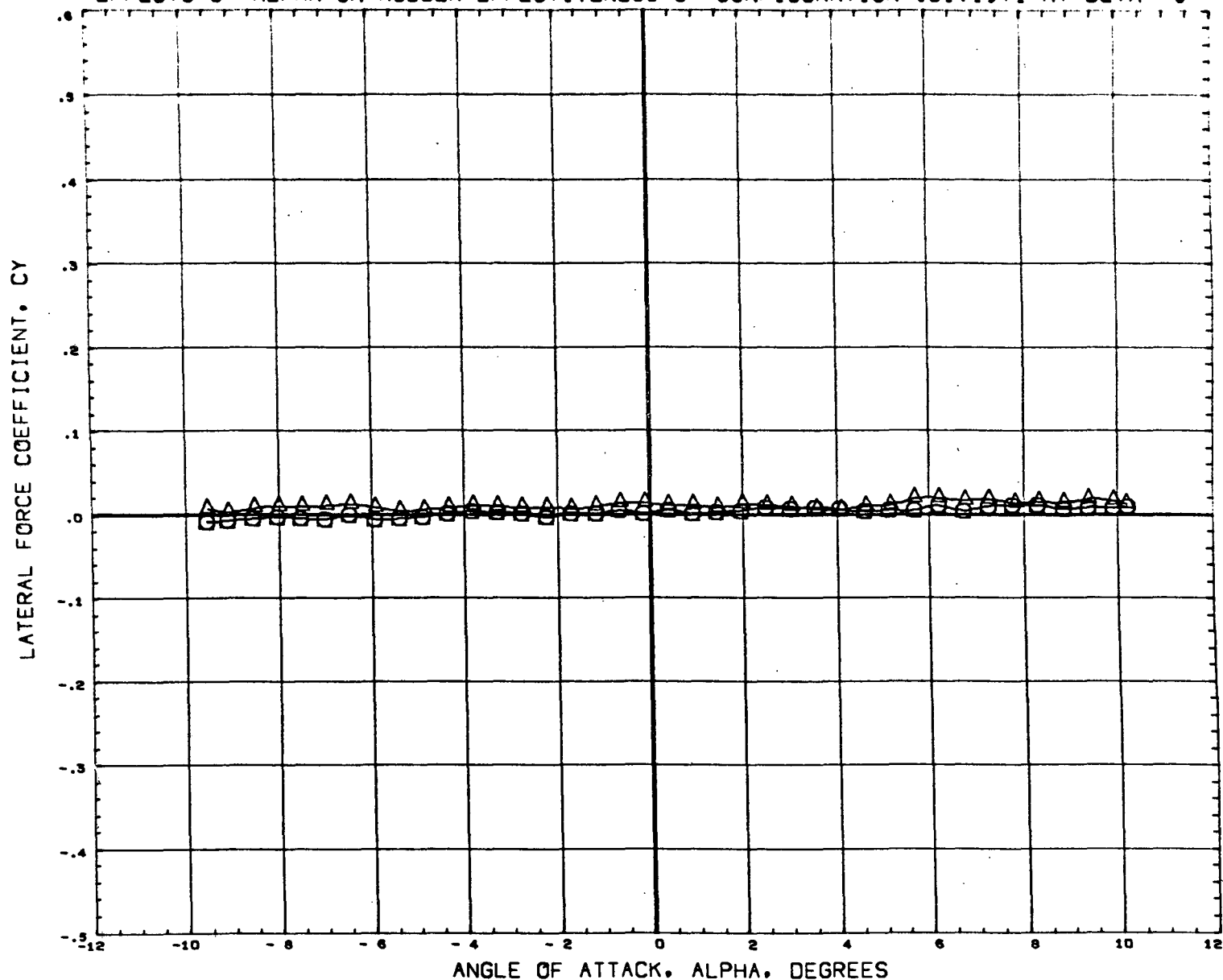
(RD7441)  MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
 (RD7445)  MDAC S-222 COMPOSITE (T-CG) (01V1)T1

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
0.000	0.000	0.000	10.000	LREF	609.5004	IN.
				BREF	882.0004	IN.
				XMRP	557.0004	IN.
				YMRP	0.0000	IN.
				ZMRP	200.0004	IN.
				SCALE	0.0060	

MACH .60

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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA =0

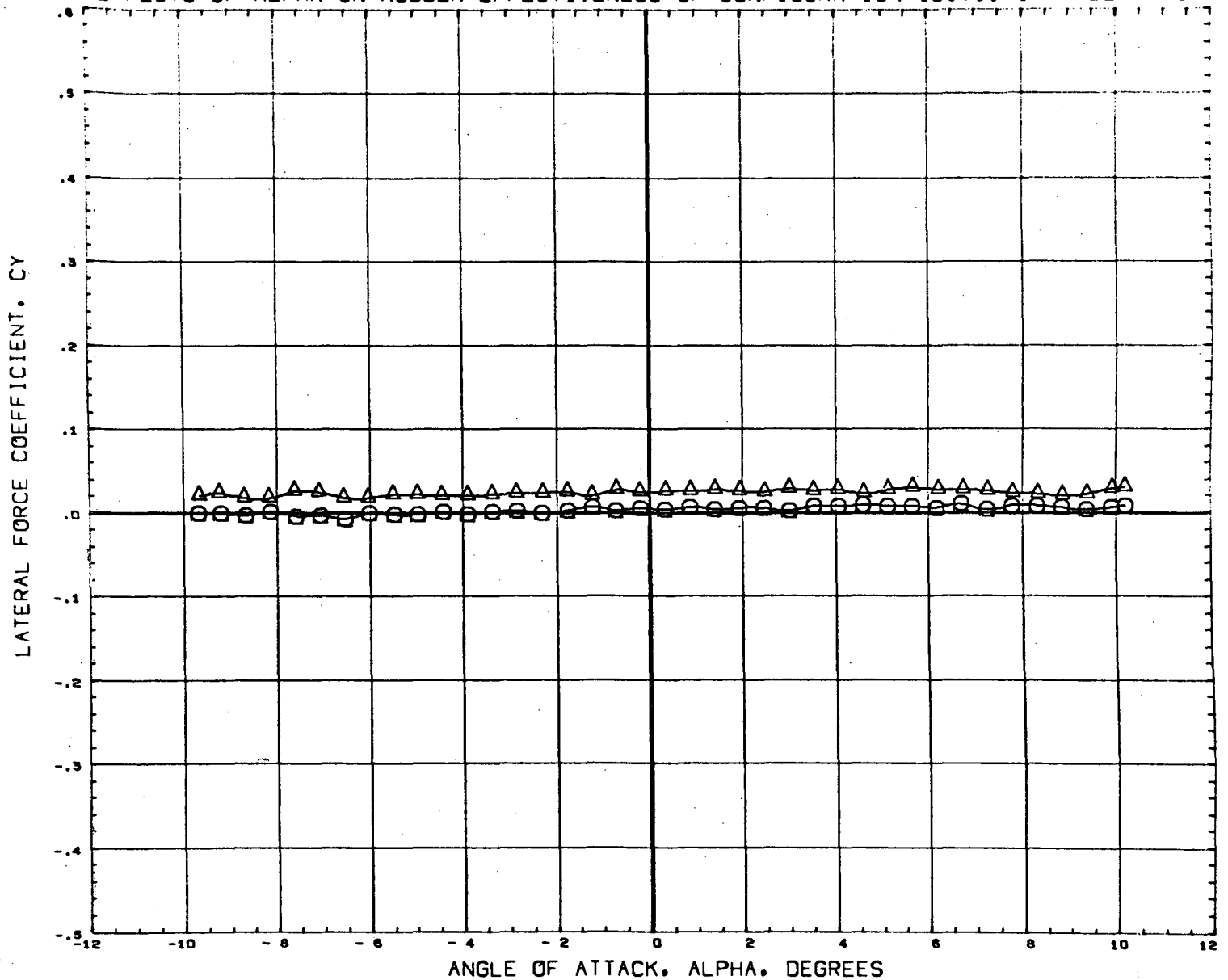


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7445)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060


MACH .90


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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7441)  MDAC S-222 COMPOSITE (T-CG) (01V1) T1

(RD7445)  MDAC S-222 COMPOSITE (T-CG) (01V1) T1

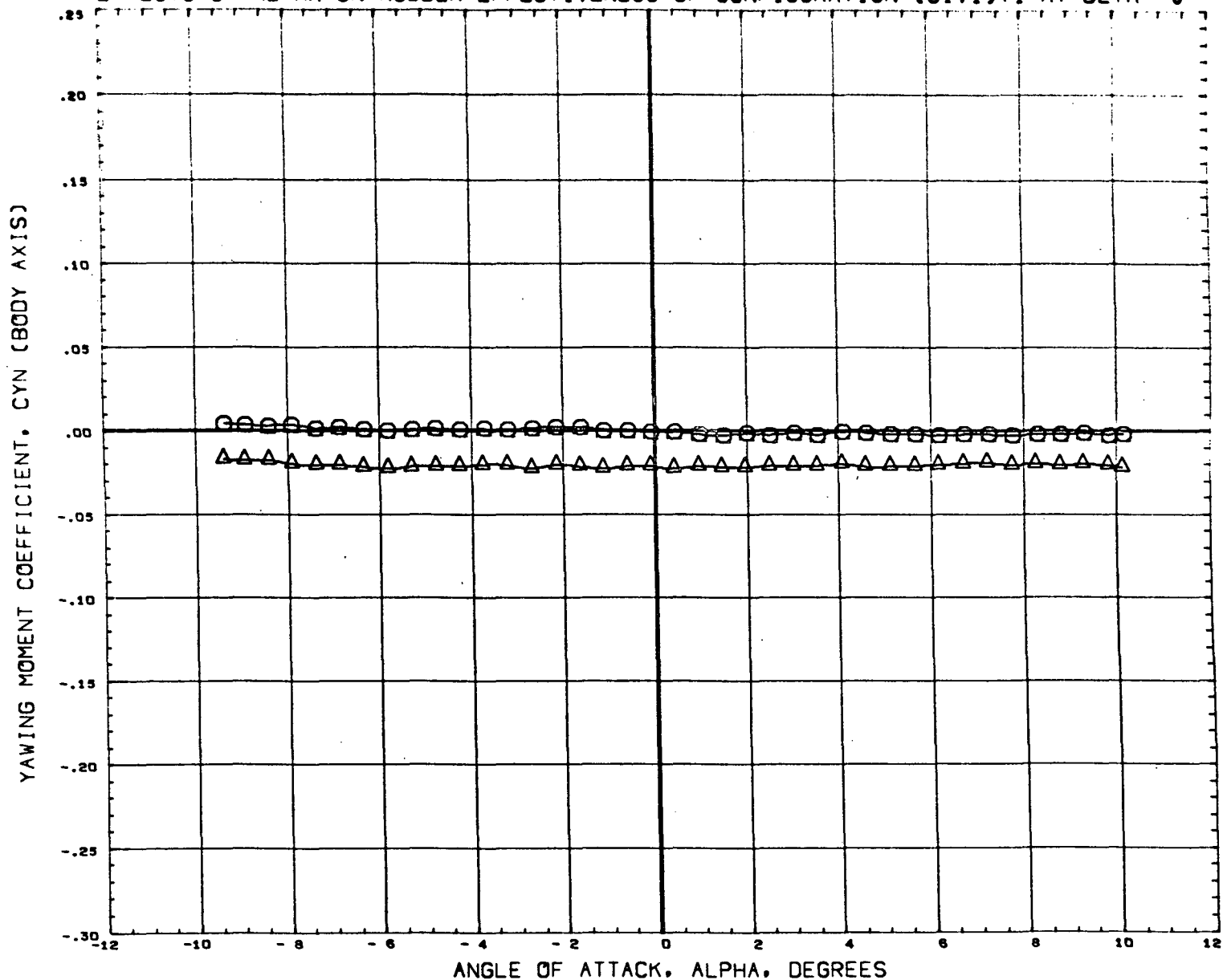
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	10.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

1.10

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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7445)	MDAC S-222 COMPOSITE (T-CG) (01V1) T1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						YMRP	557.0004 IN.
						ZMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

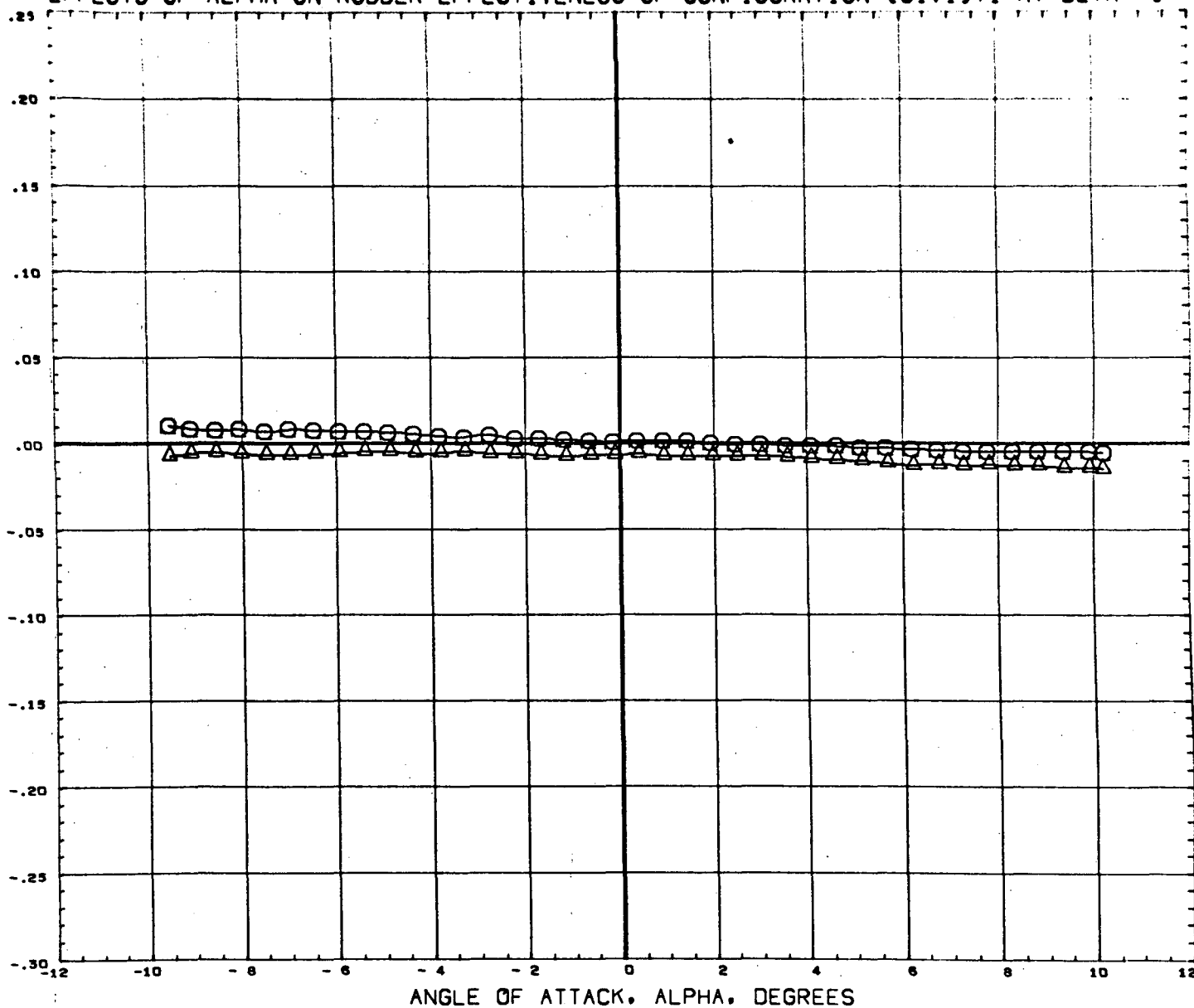
MACH .60

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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA =0

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RD7441) ○	MDAC S-222 COMPOSITE (T-CG) (01V1)T1
(RD7445) △	MDAC S-222 COMPOSITE (T-CG) (01V1)T1

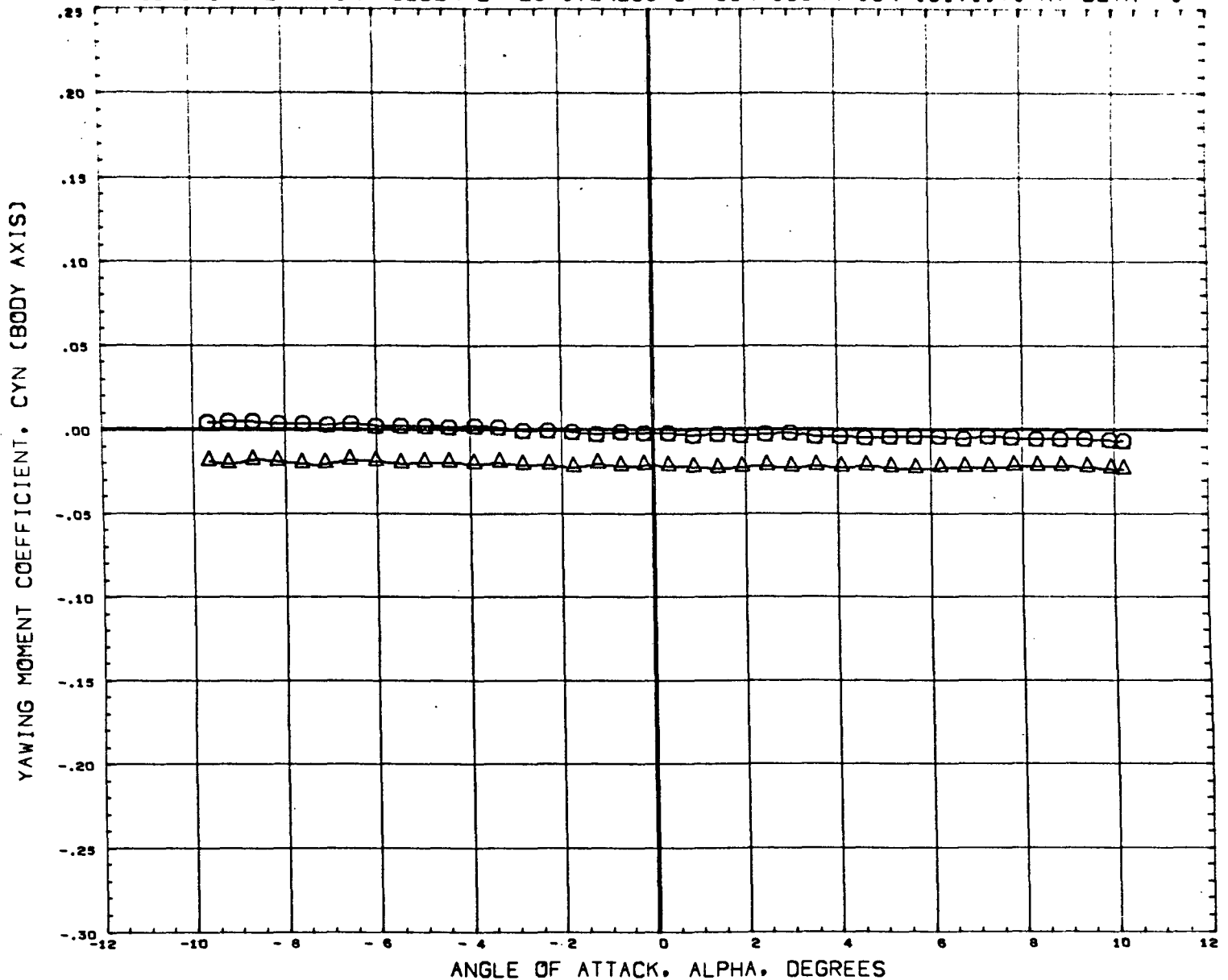
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION
0.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
0.000	0.000	0.000	10.000	LREF 609.5004 IN.
				BREF 882.0004 IN.
				XMRP 557.0004 IN.
				YMRP 0.0000 IN.
				ZMRP 200.0004 IN.
				SCALE 0.0060

MACH

.90

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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0

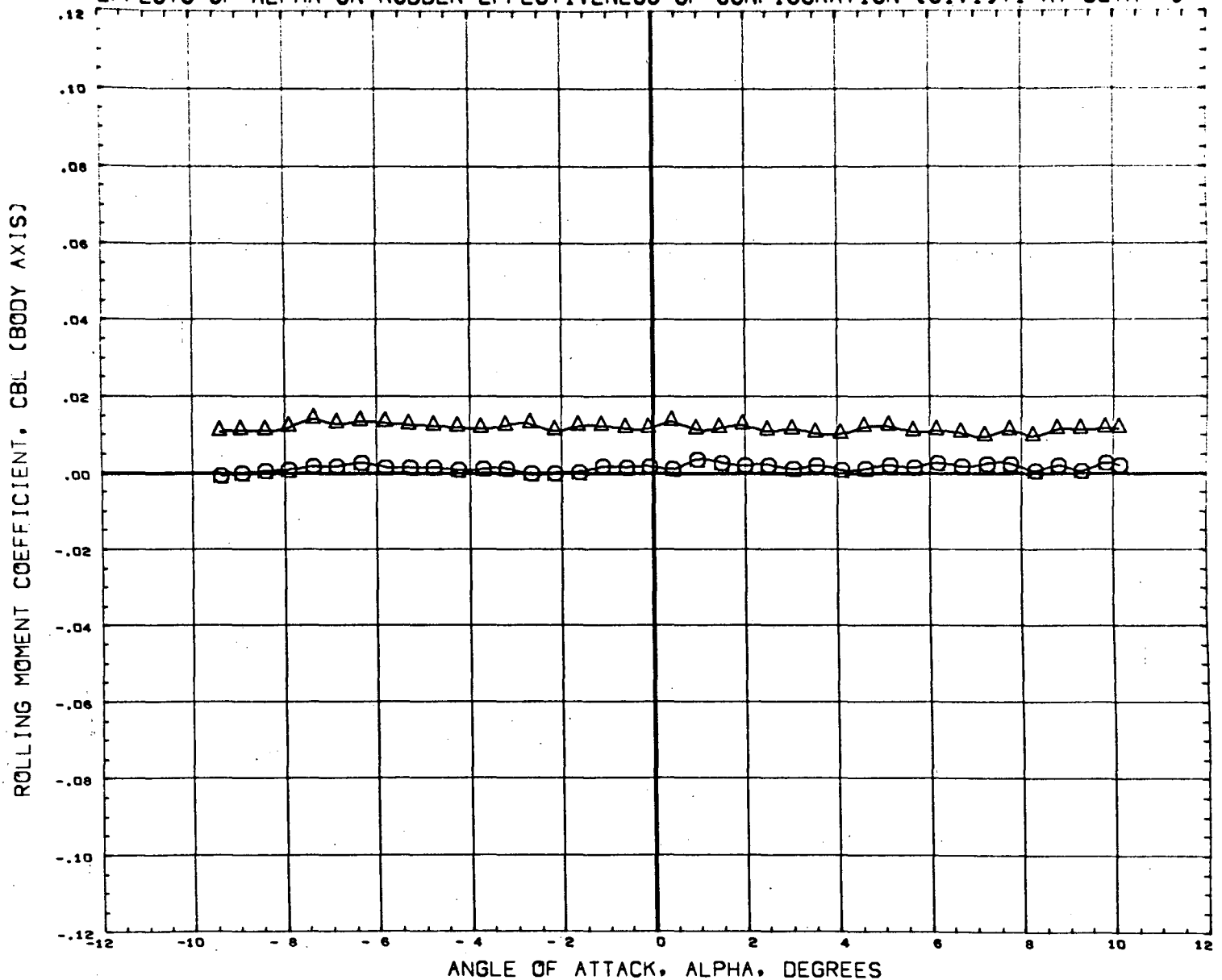


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7445)	MDAC S-222 COMPOSITE(T-CG) (01V1)T1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	862.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.10

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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA = 0



DATA SET SYMBOL : CONFIGURATION DESCRIPTION  
 (RD7441) ○ MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
 (RD7445) ▲ MDAC S-222 COMPOSITE (T-CG) (01V1)T1

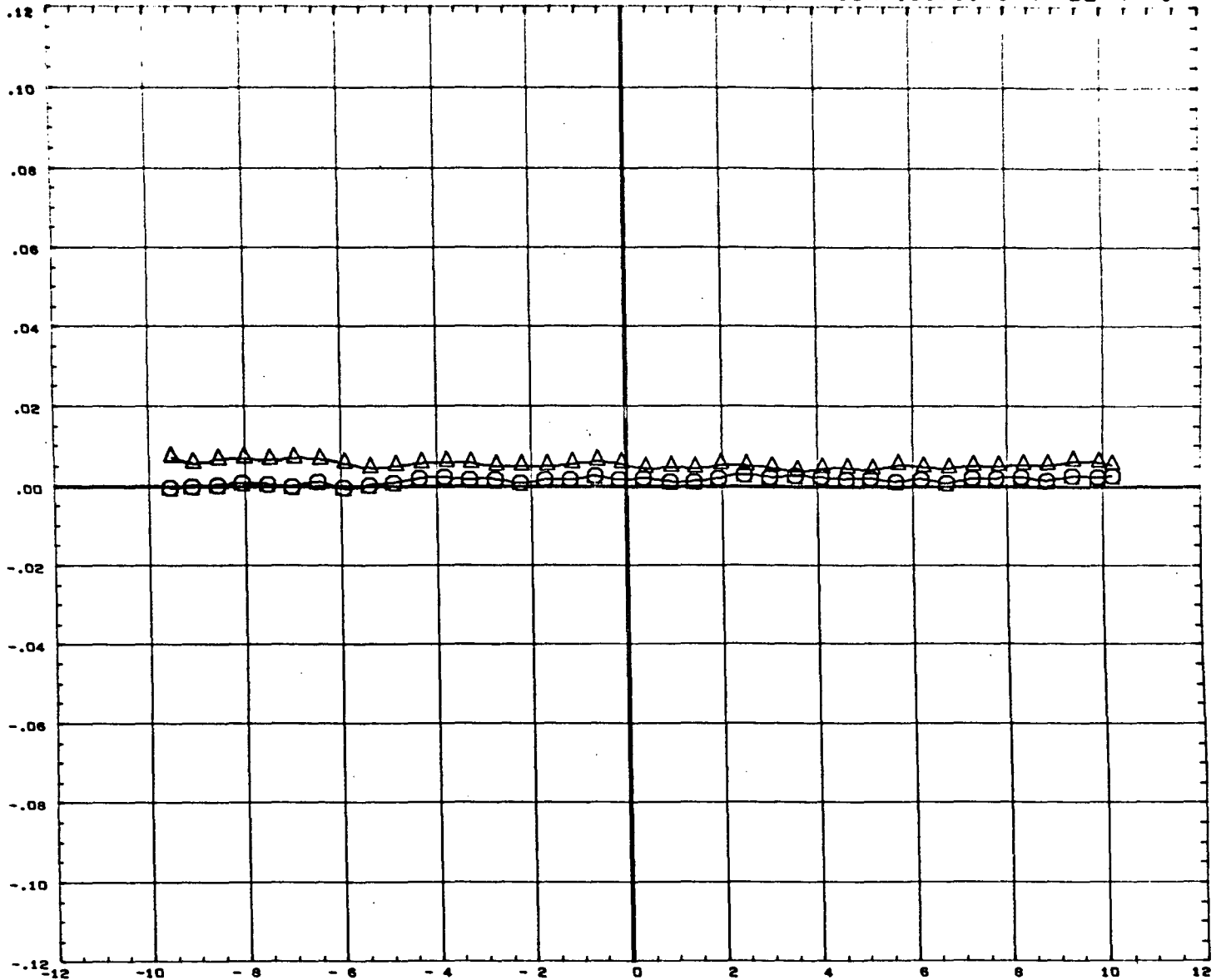
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	10.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .60

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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA =0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



DATA SET SYMBOL      CONFIGURATION DESCRIPTION  
(RD7441)      ○      MDAC S-222 COMPOSITE (T-CG) (01V1)T1  
(RD7445)      △      MDAC S-222 COMPOSITE (T-CG) (01V1)T1

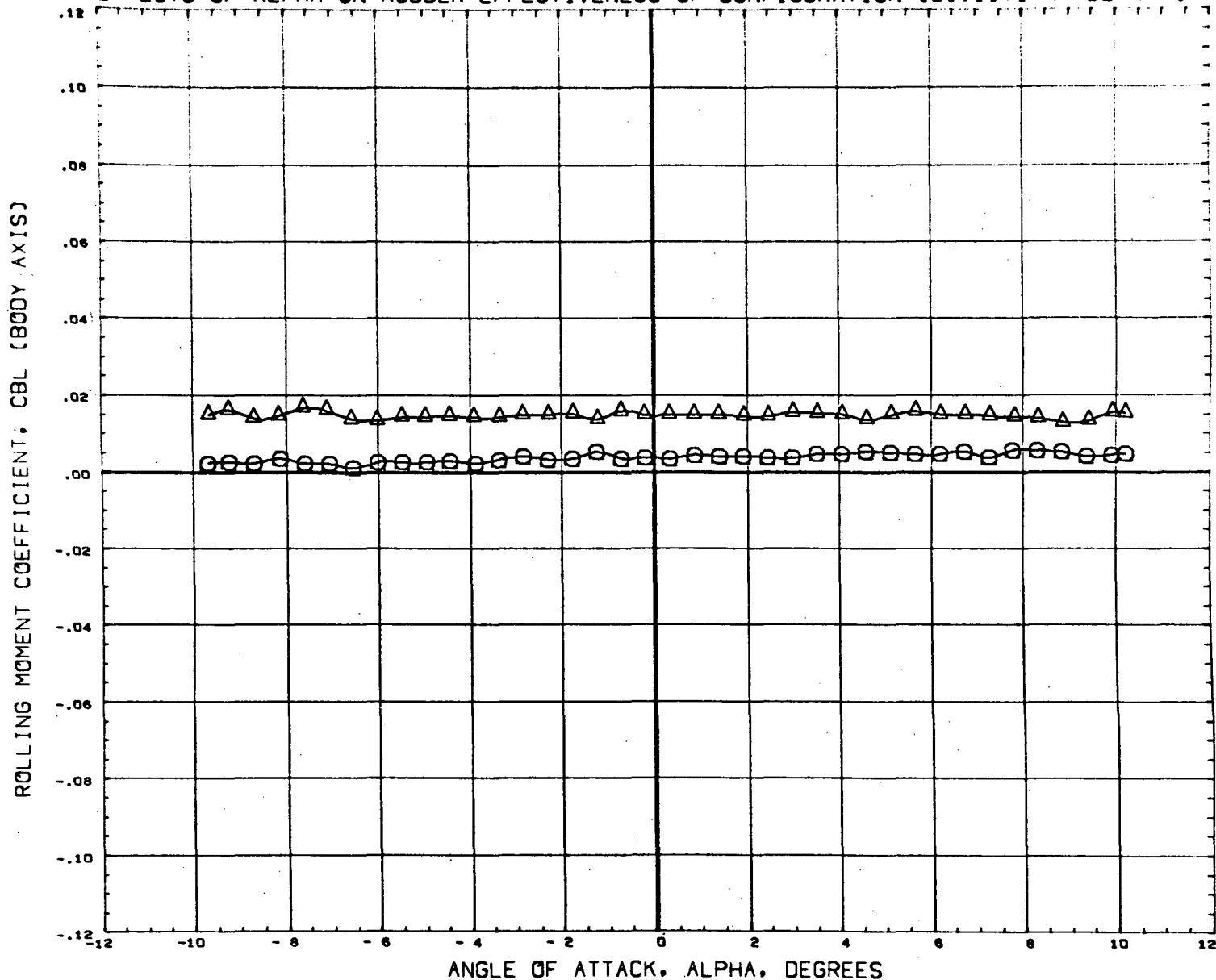
BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	10.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
YMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

MACH .90

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# EFFECTS OF ALPHA ON RUDDER EFFECTIVENESS OF CONFIGURATION (01V1)T1 AT BETA =0



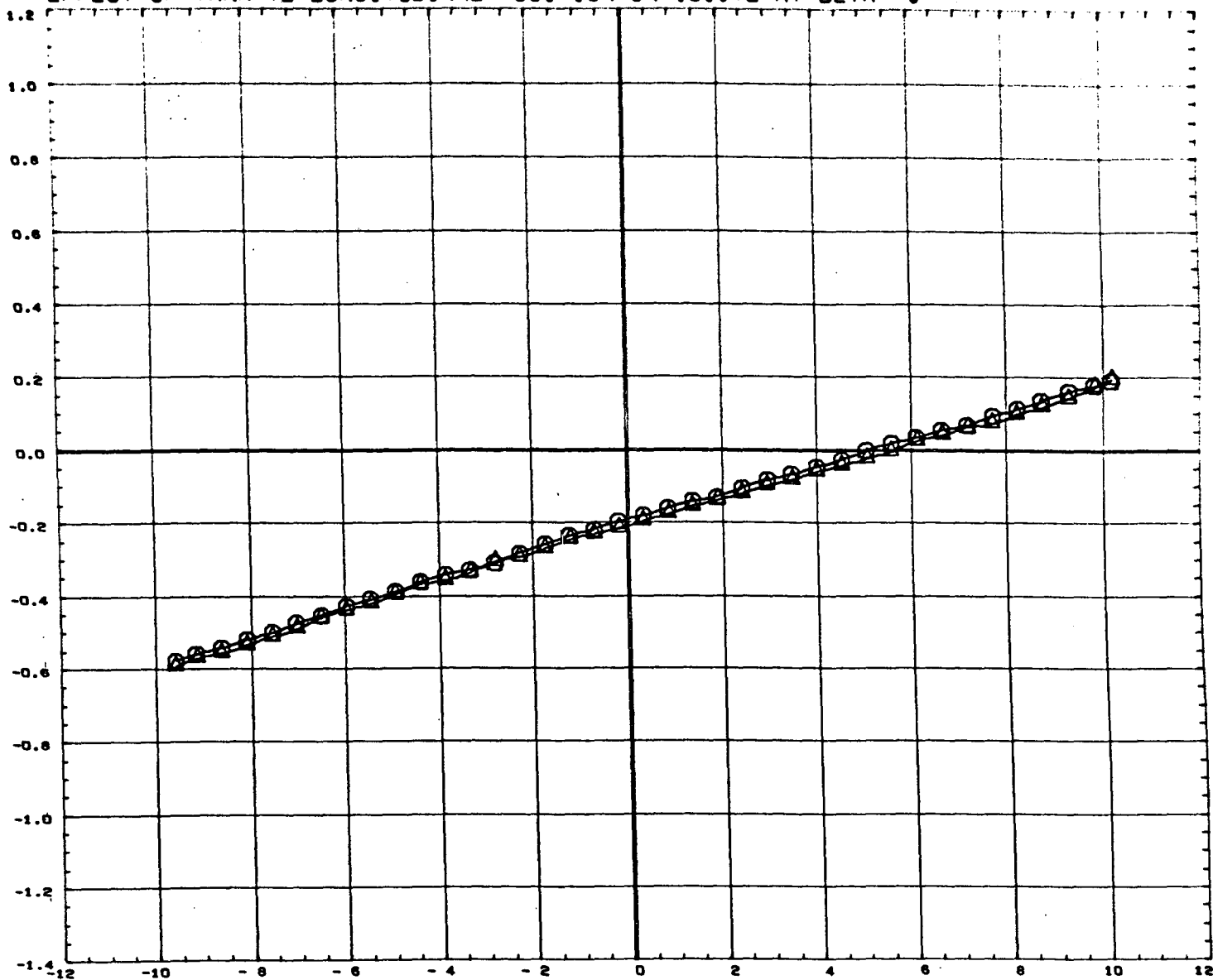
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7441)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7445)	MDAC S-222 COMPOSITE (T-CG) (01V1)T1	0.000	0.000	0.000	10.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.10

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA =0

NORMAL FORCE COEFFICIENT, CN



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7470)	MDAC S-222 COMPOSITE (T-CG) (O1) T2
(CD7472)	MDAC S-222 COMPOSITE (T-CG) (O1) T2A

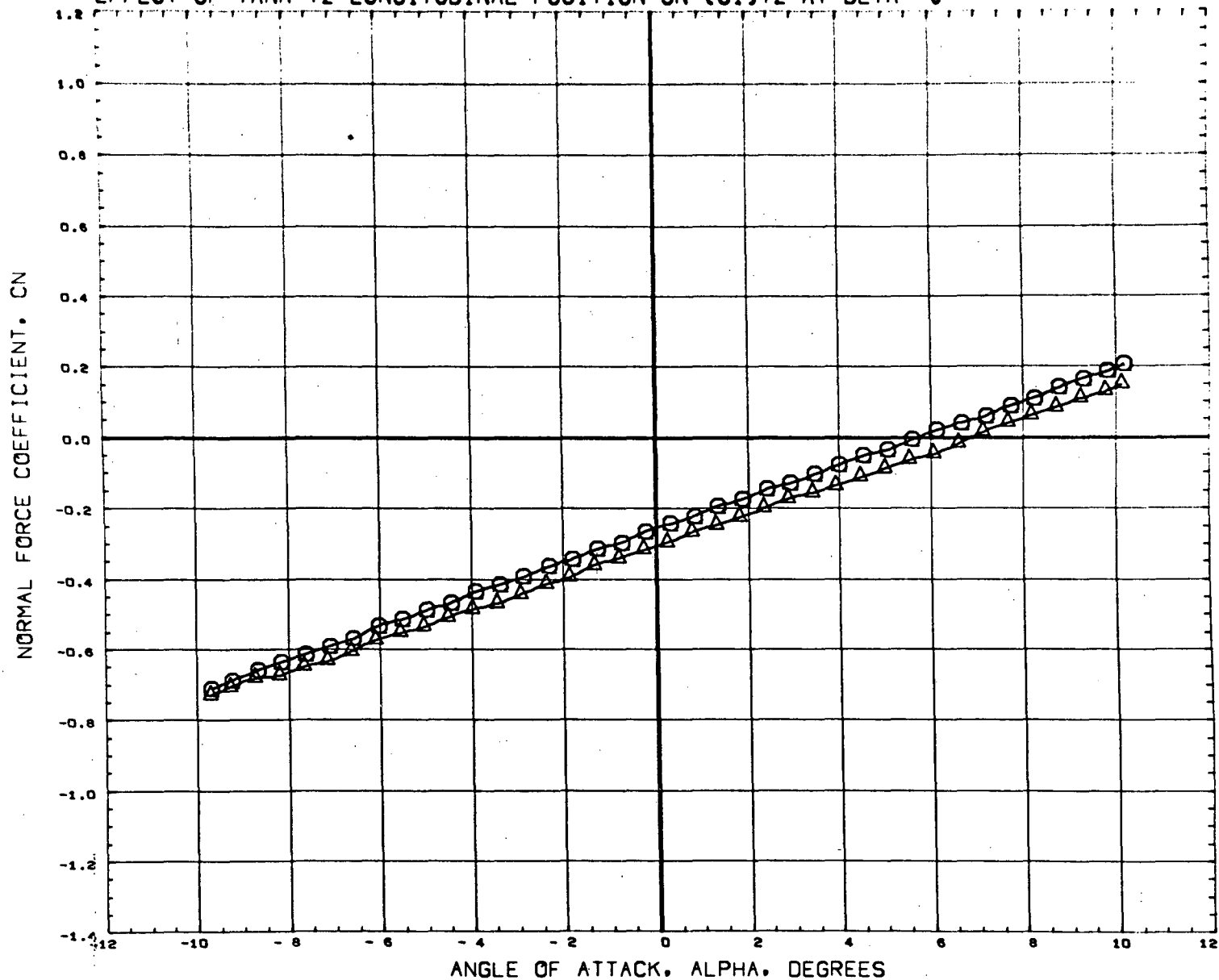
BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA = 0

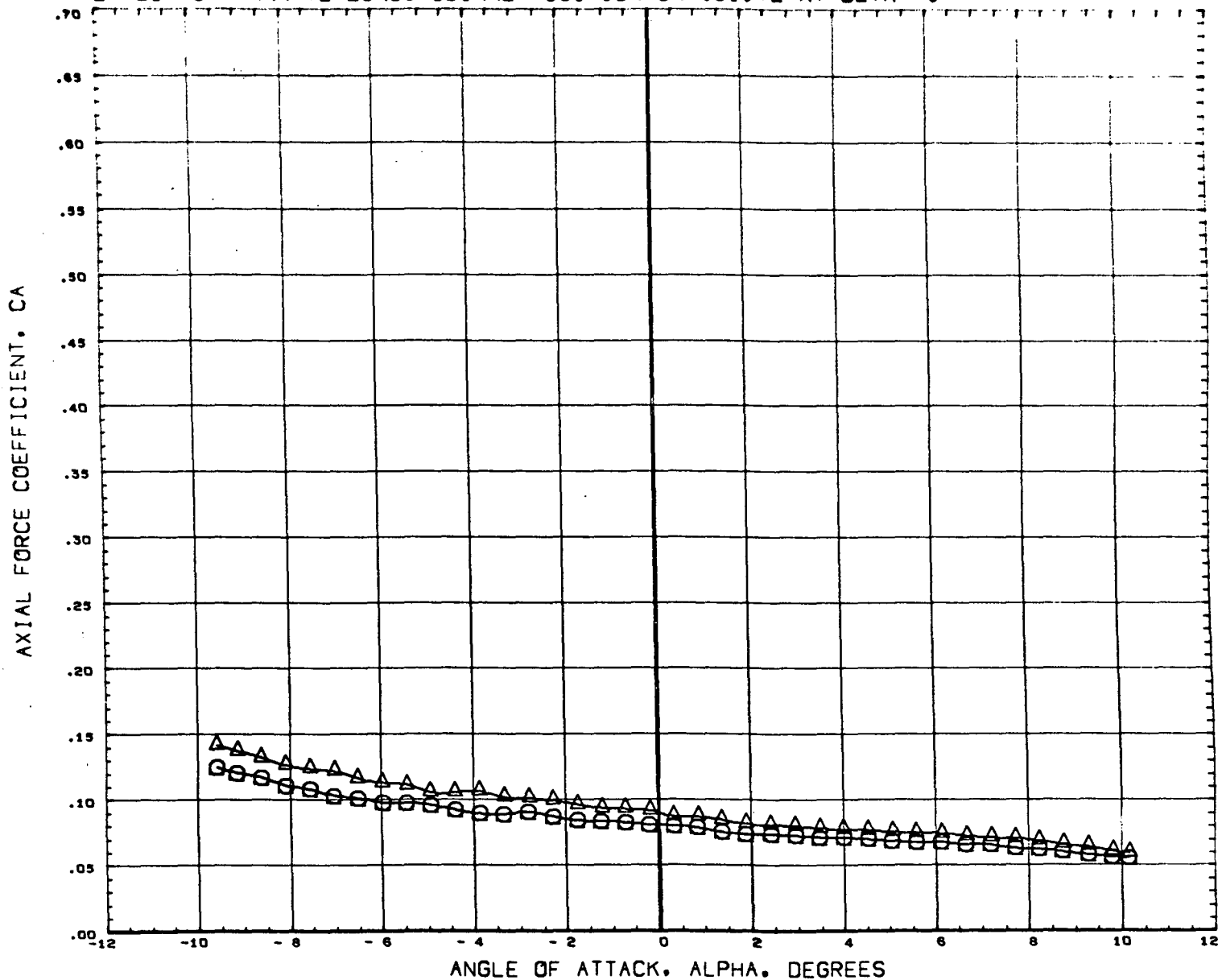


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7470)	MDAC S-222 COMPOSITE (T-CG) (O1) T2	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7472)	MDAC S-222 COMPOSITE (T-CG) (O1) T2A	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 AT BETA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7470) MDAC S-222 COMPOSITE (T-CG) (01)T2  
 (CD7472) MDAC S-222 COMPOSITE (T-CG) (01)T2A

BETA ELEVTR AILRON RUDDER  
 0.000 0.000 0.000 0.000  
 0.000 0.000 0.000 0.000

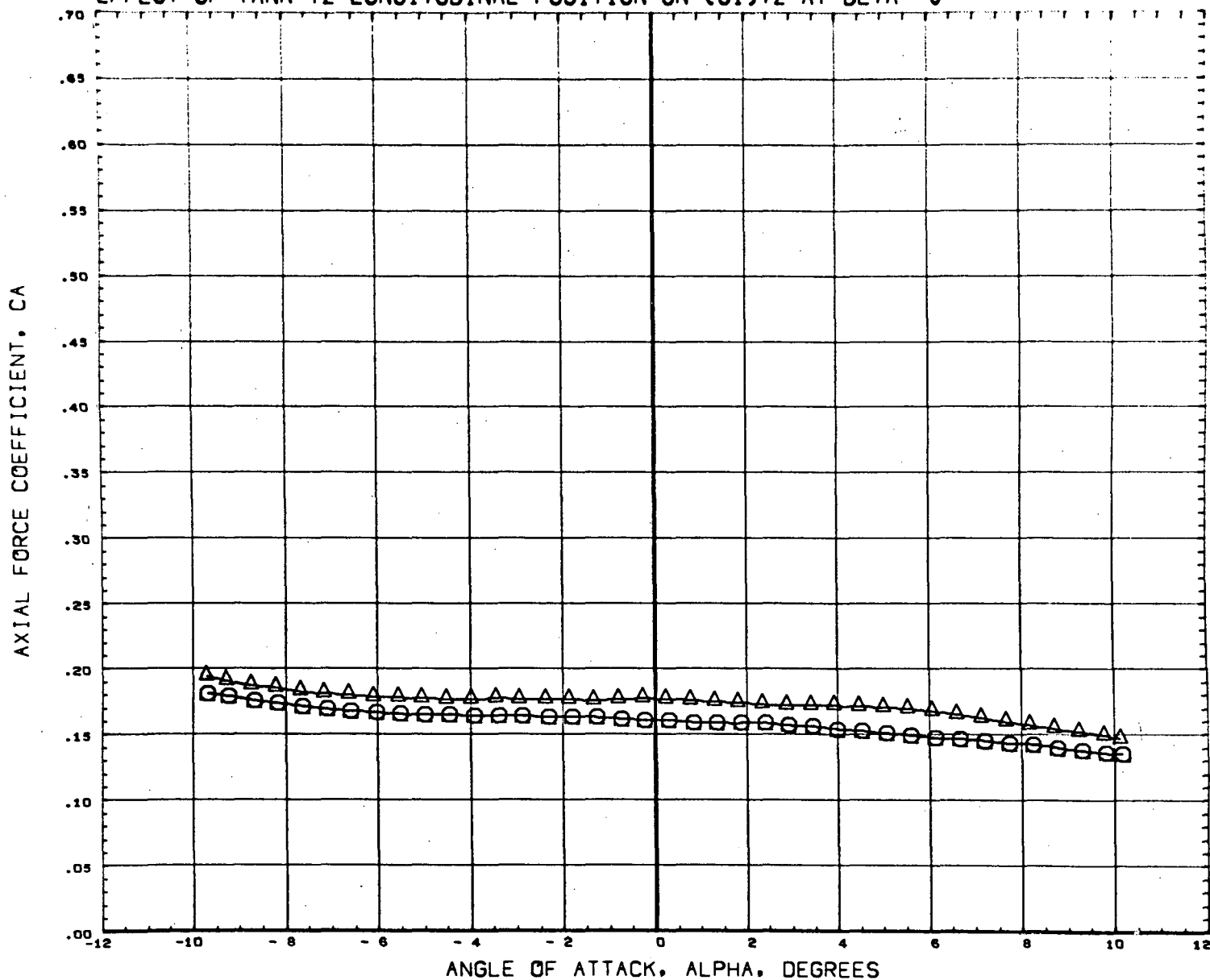
REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7470)  $\bigcirc$  MDAC S-222 COMPOSITE (T-CG) (O1)T2  
 (CD7472)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (O1)T2A

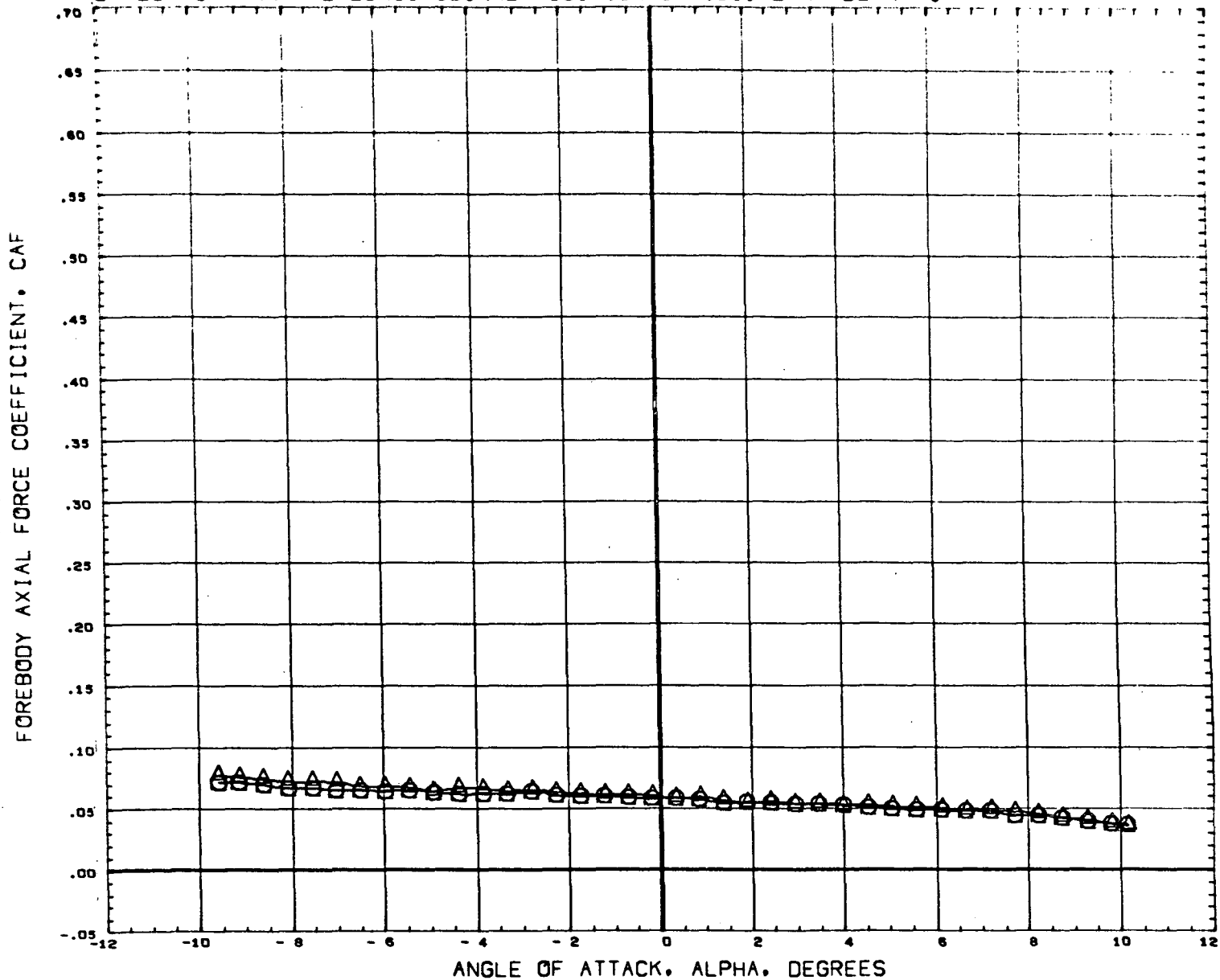
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA = 0



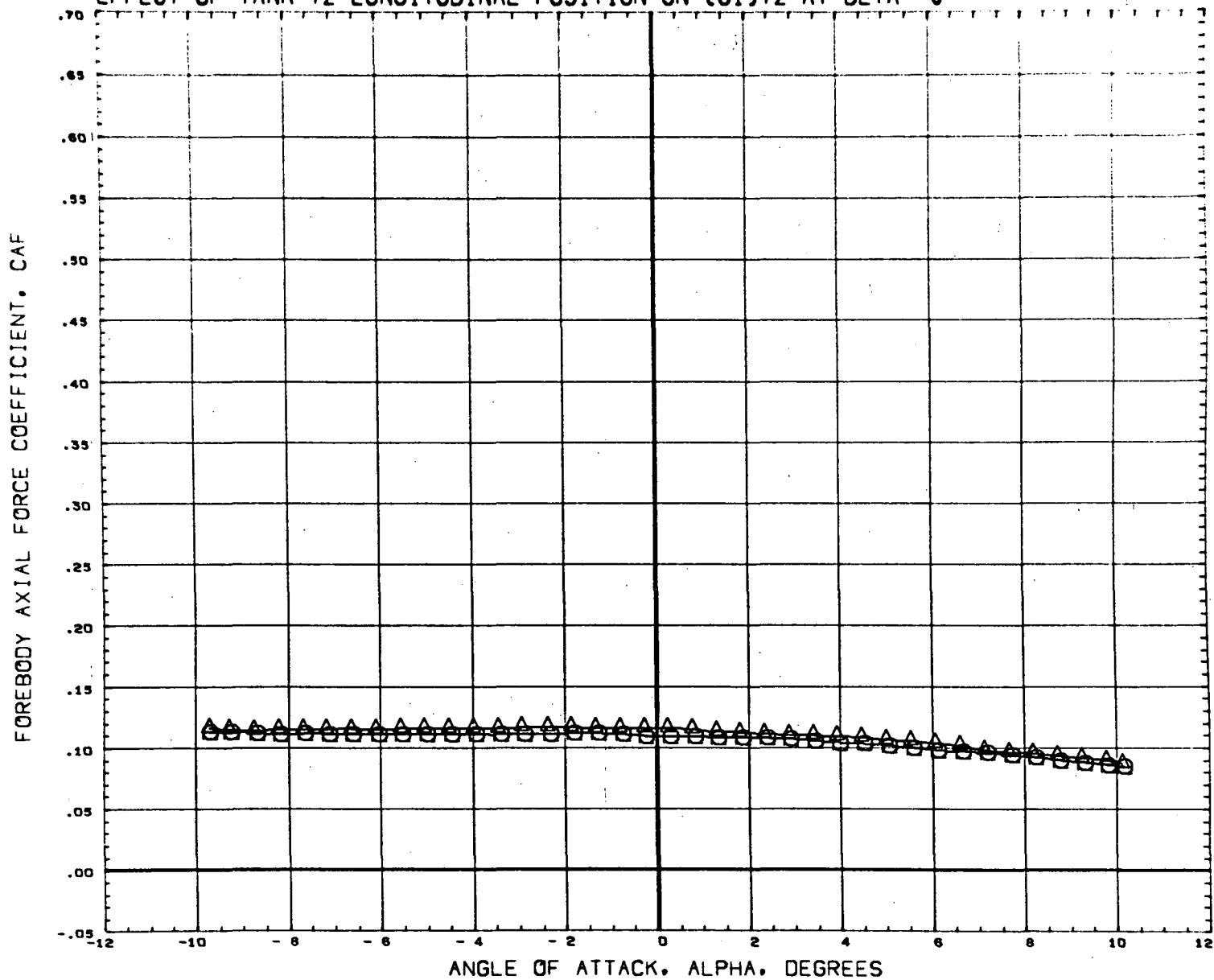
DATA SET SYMBOL      CONFIGURATION DESCRIPTION  
(CD7470)      ○      MDAC S-222 COMPOSITE (T-CG) (O1)T2  
(CD7472)      △      MDAC S-222 COMPOSITE (T-CG) (O1)T2A

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH      .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA =0



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7470) MDAC S-222 COMPOSITE (T-CG) (O1)T2  
 (CD7472) MDAC S-222 COMPOSITE (T-CG) (O1)T2A

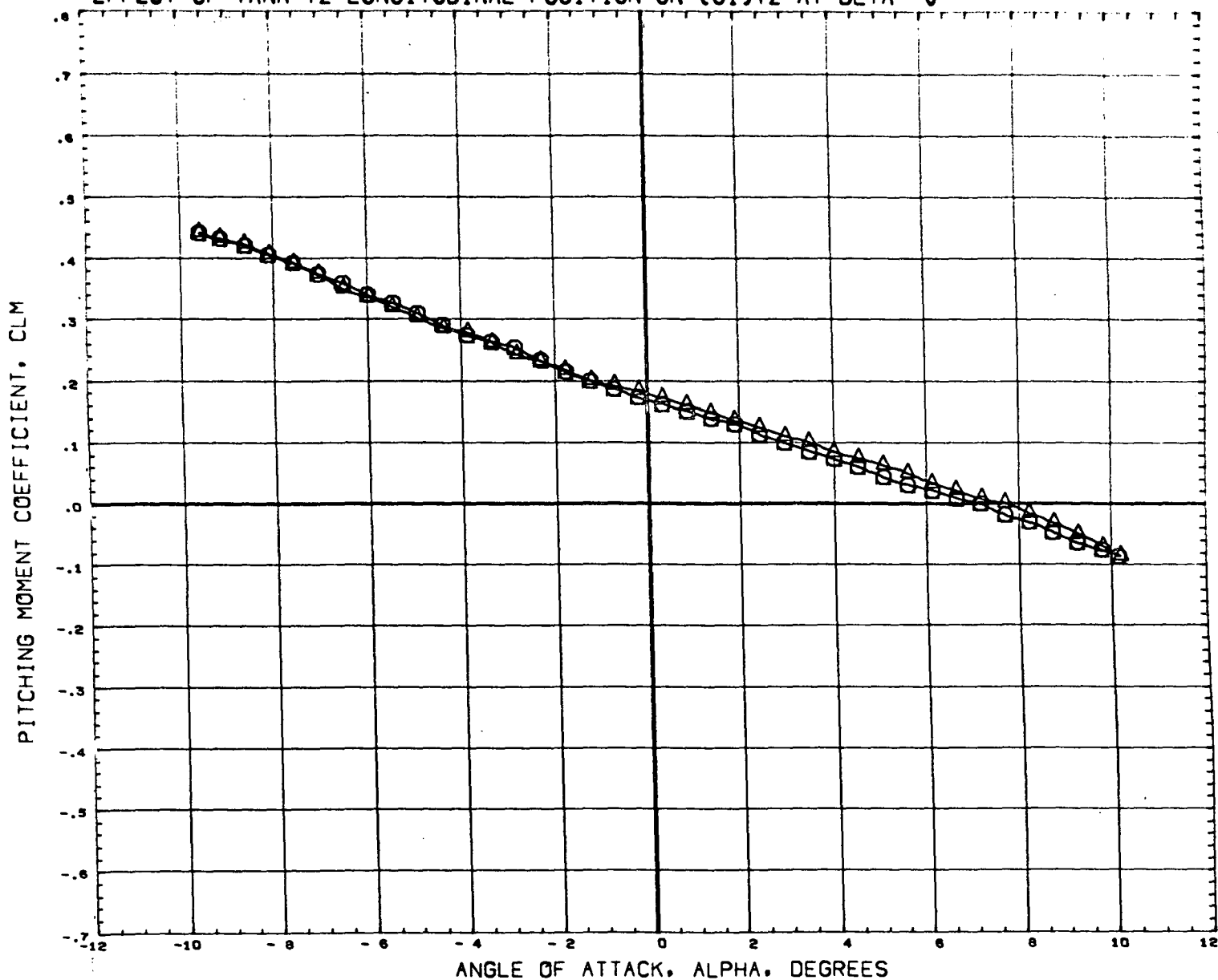
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 AT BETA = 0



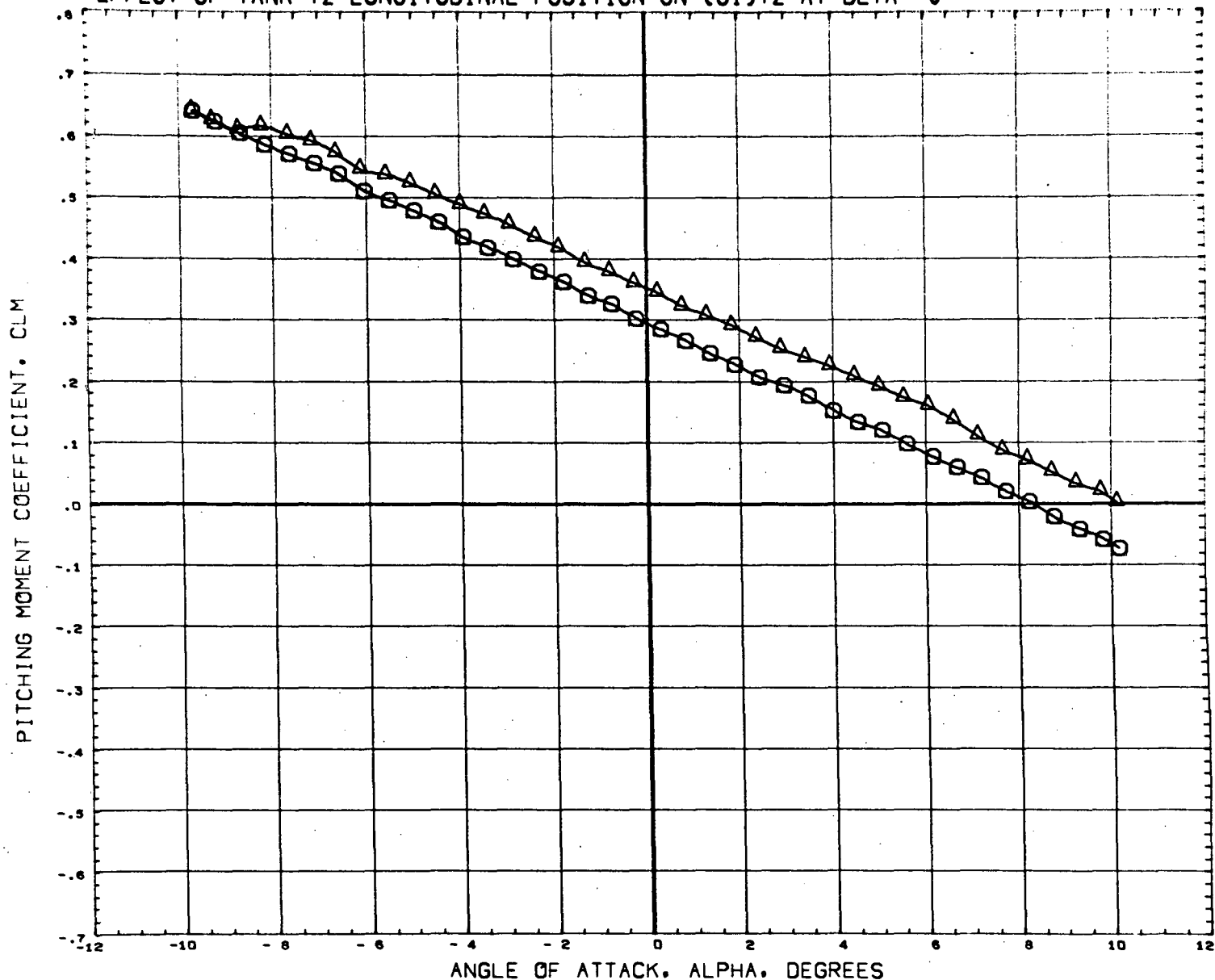
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7470) ○	MDAC S-222 COMPOSITE (T-CG) (01)T2
(CD7472) △	MDAC S-222 COMPOSITE (T-CG) (01)T2A

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 AT BETA = 0

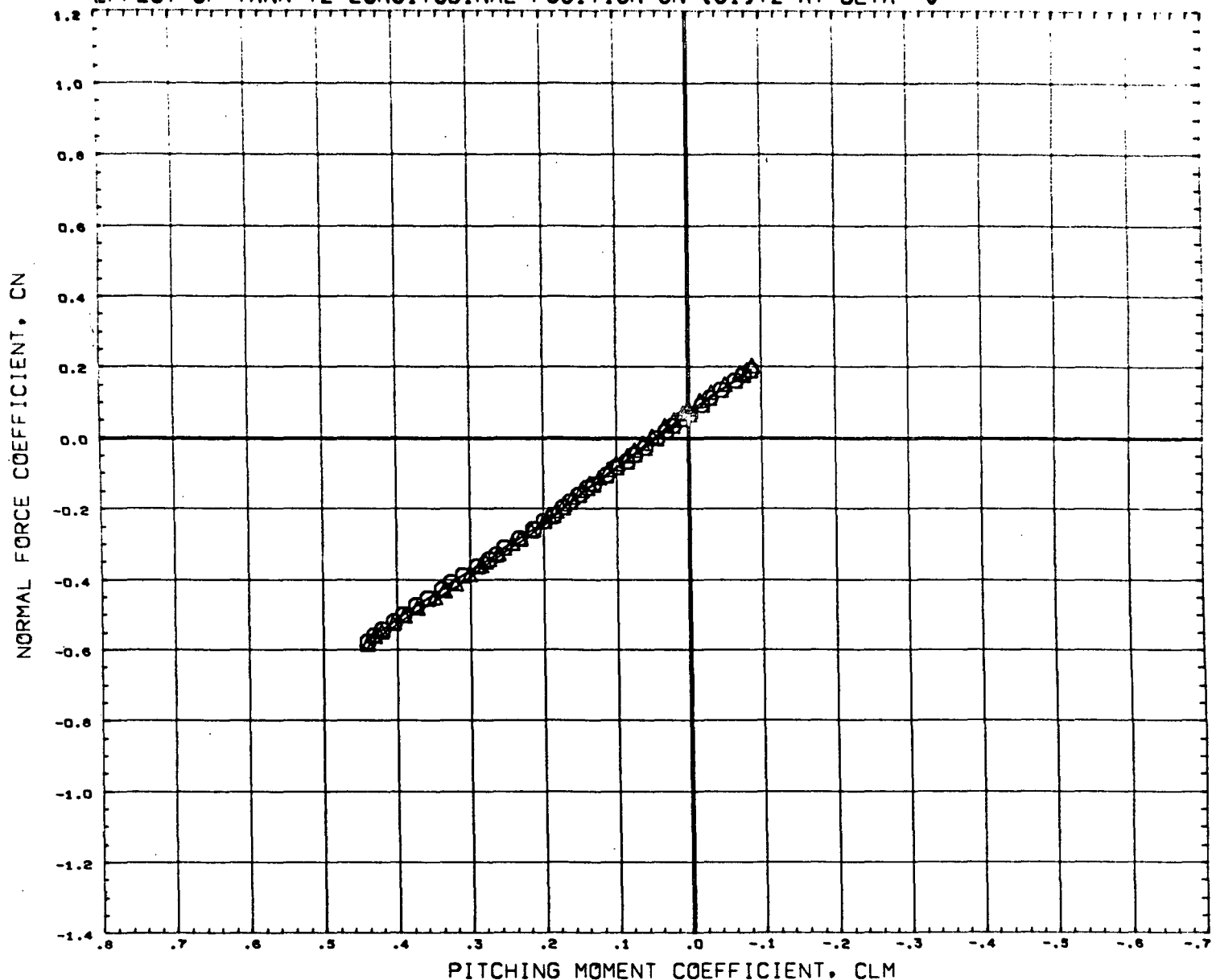


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(CD7470)	MDAC S-222 COMPOSITE(T-CG) (01)T2	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7472)	MDAC S-222 COMPOSITE(T-CG) (01)T2A	0.000	0.000	0.000	0.000	LREF	609.5004	IN.
						BREF	882.0004	IN.
						XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 AT BETA = 0

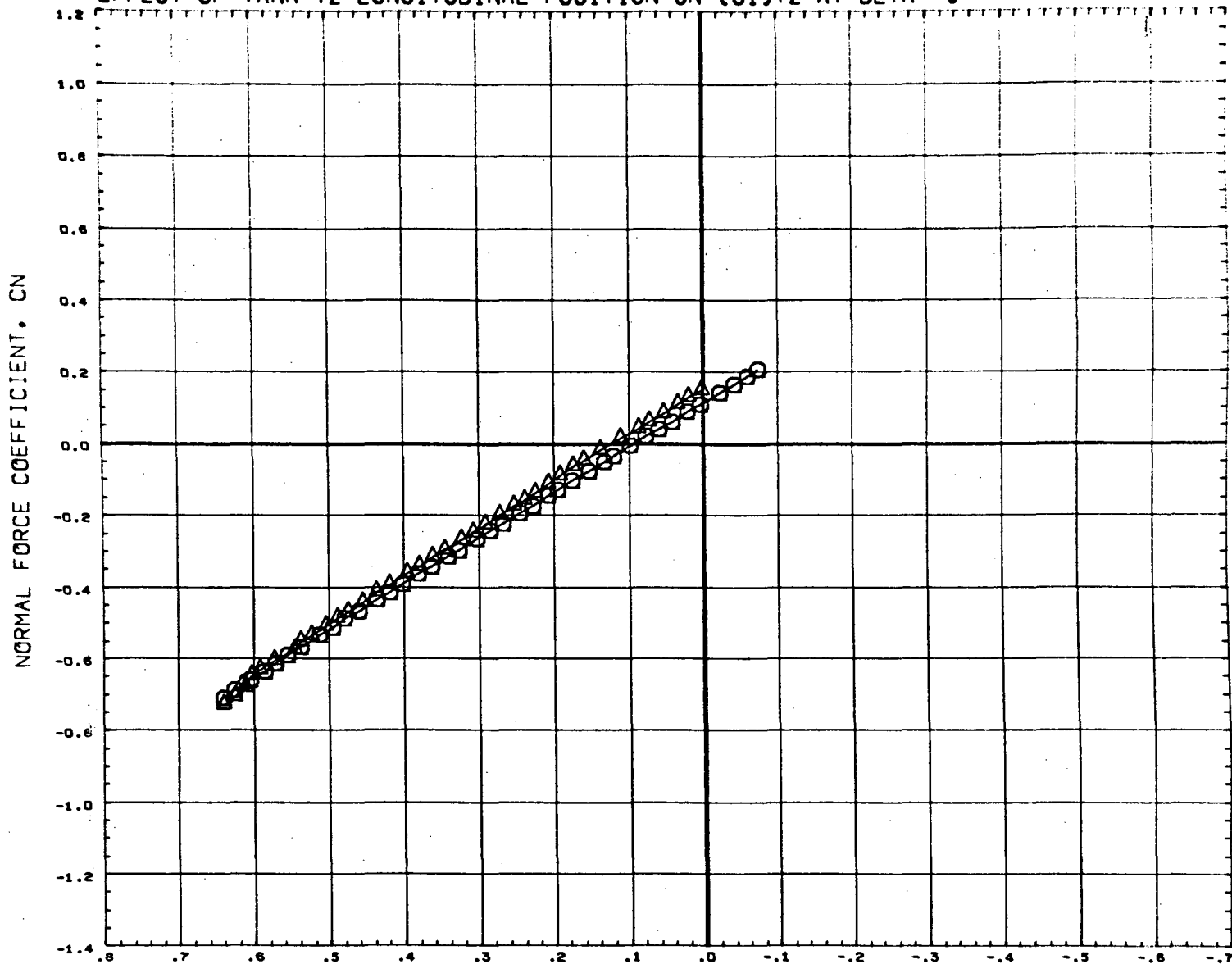


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(CD7470)	MDAC S-222 COMPOSITE (T-CG) (01) T2	0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7472)	MDAC S-222 COMPOSITE (T-CG) (01) T2A	0.000	0.000	0.000	0.000	LREF	609.5004	IN.
						BREF	882.0004	IN.
						XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH .90



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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 AT BETA =0



PITCHING MOMENT COEFFICIENT, CLM

DATA SET SYMBOL CONFIGURATION DESCRIPTION

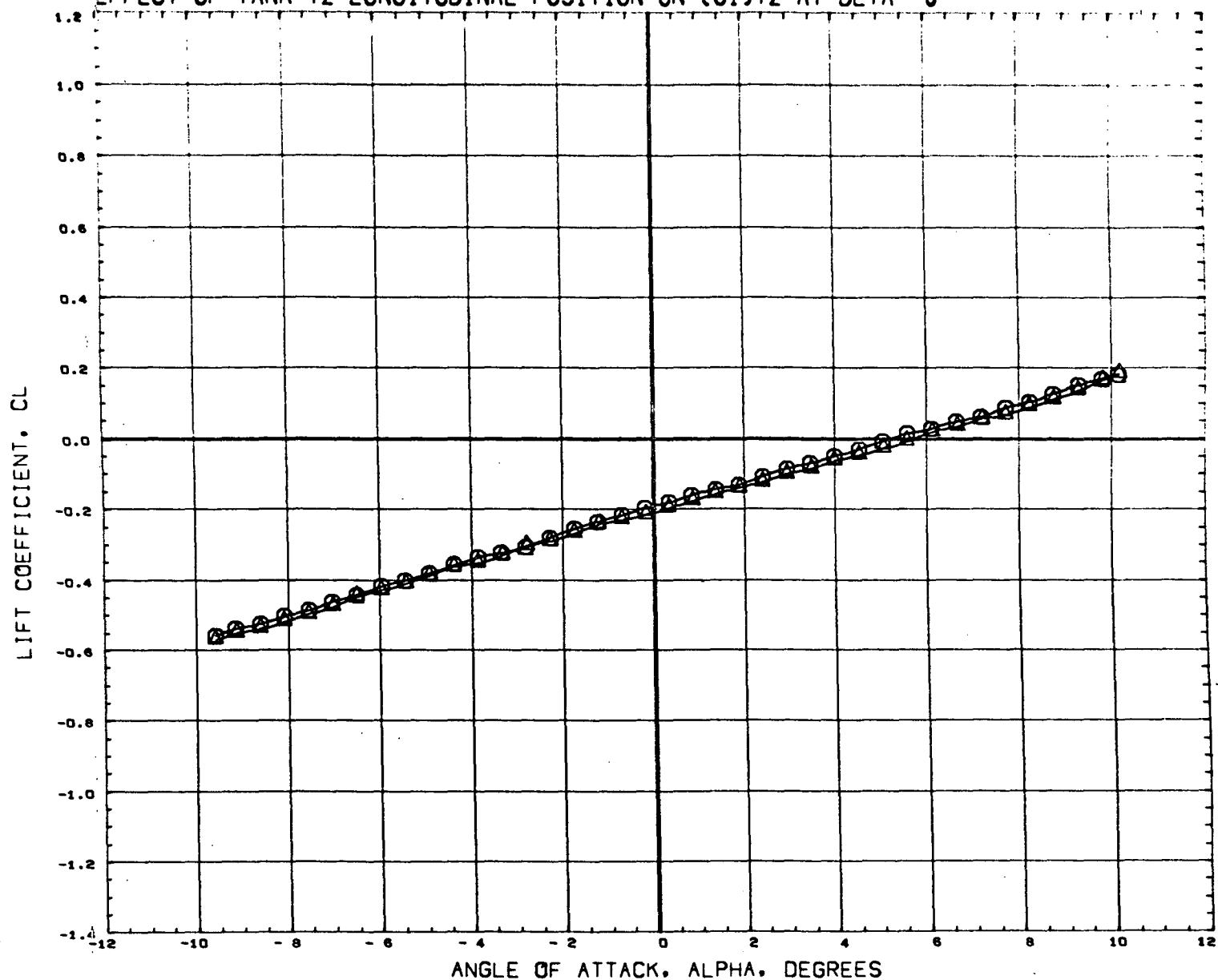
(07470)  MDAC S-222 COMPOSITE (T-CG) (01)T2  
(07472)  MDAC S-222 COMPOSITE (T-CG) (01)T2A

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA =0



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7470)	MDAC S-222 COMPOSITE (T-CG) (O1)T2
(CD7472)	MDAC S-222 COMPOSITE (T-CG) (O1)T2A

BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

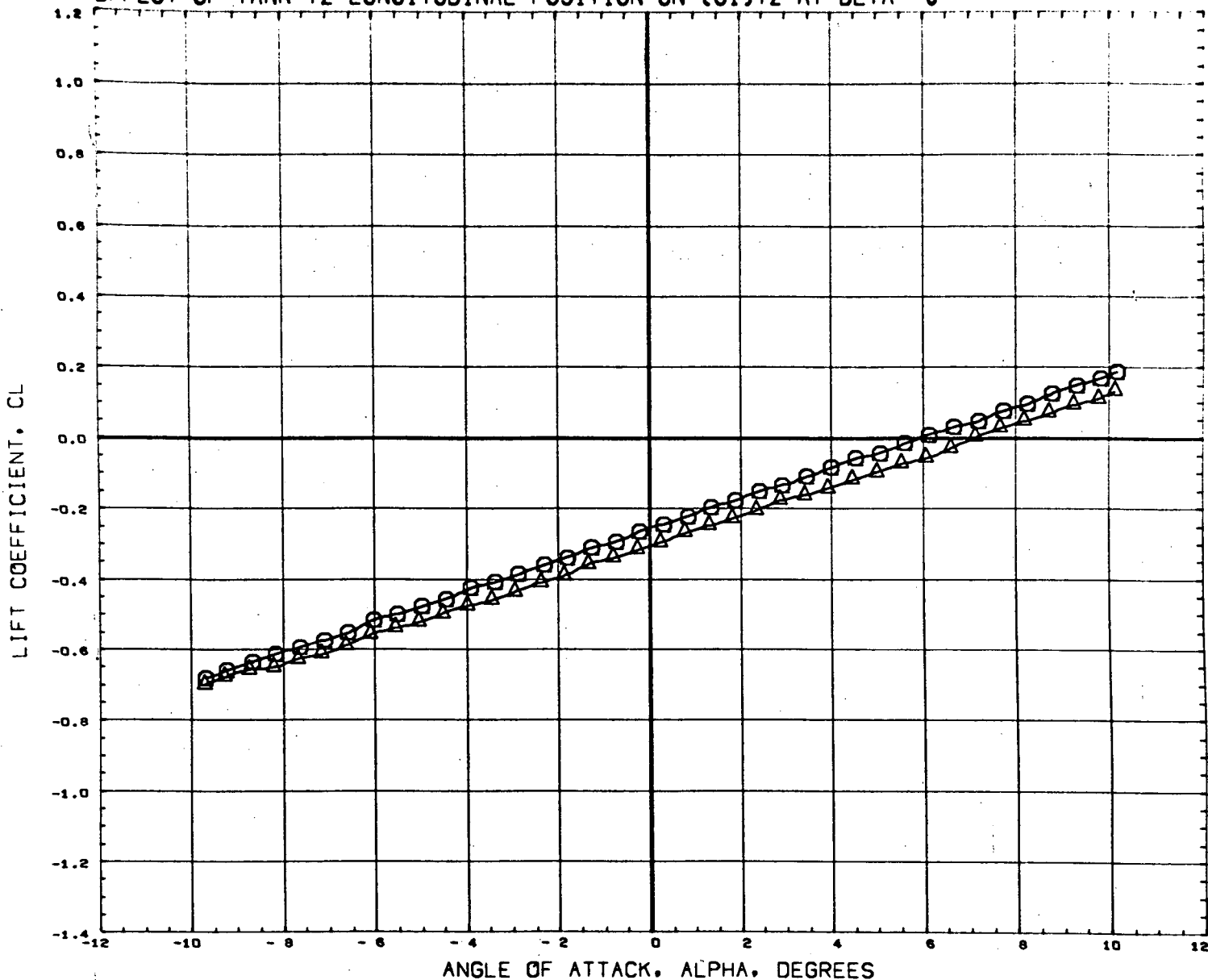
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 AT BETA = 0



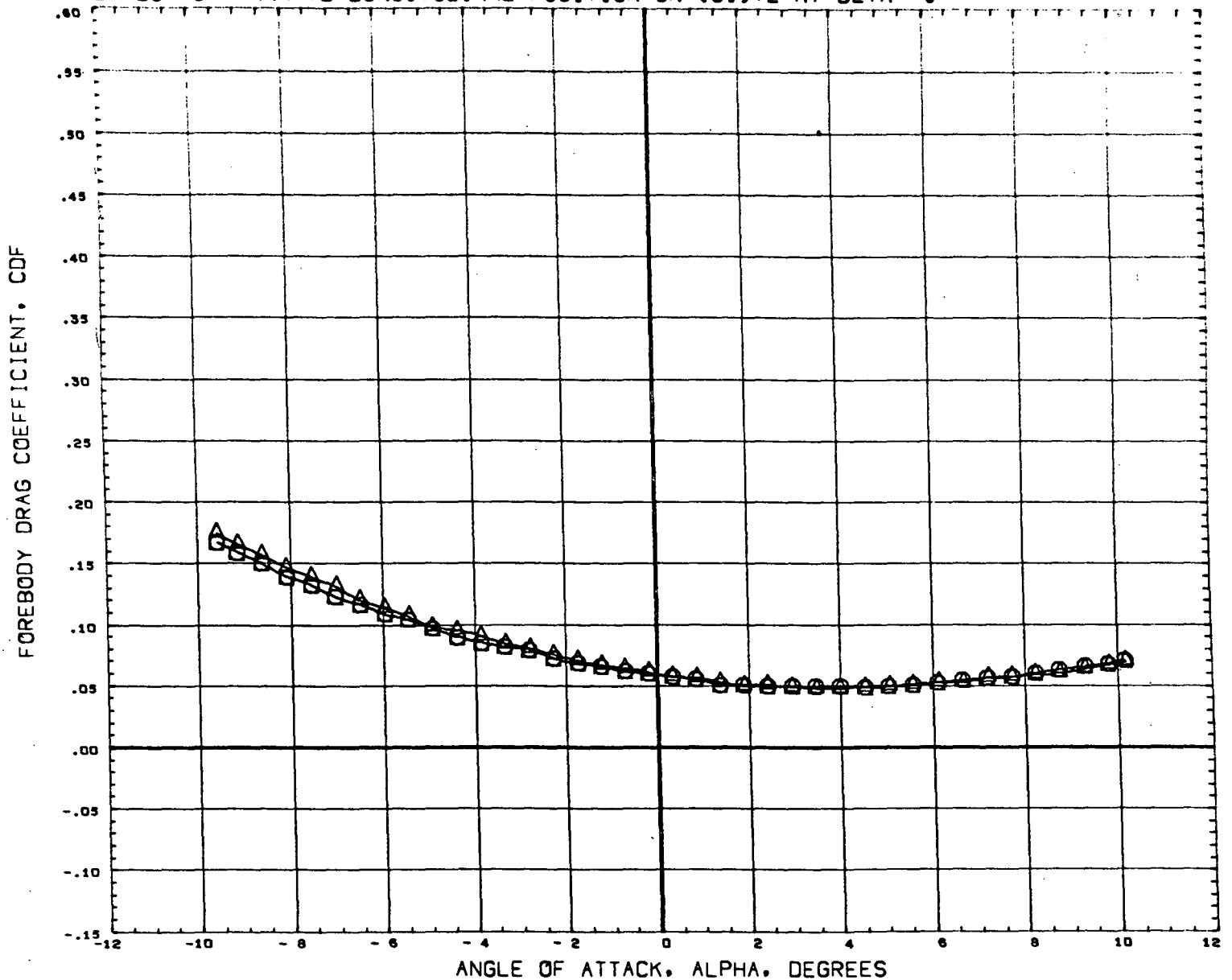
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7470) (01)T2  
 (CD7472) (01)T2A

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 AT BETA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7470) (01)T2  
 (CD7472) (01)T2A

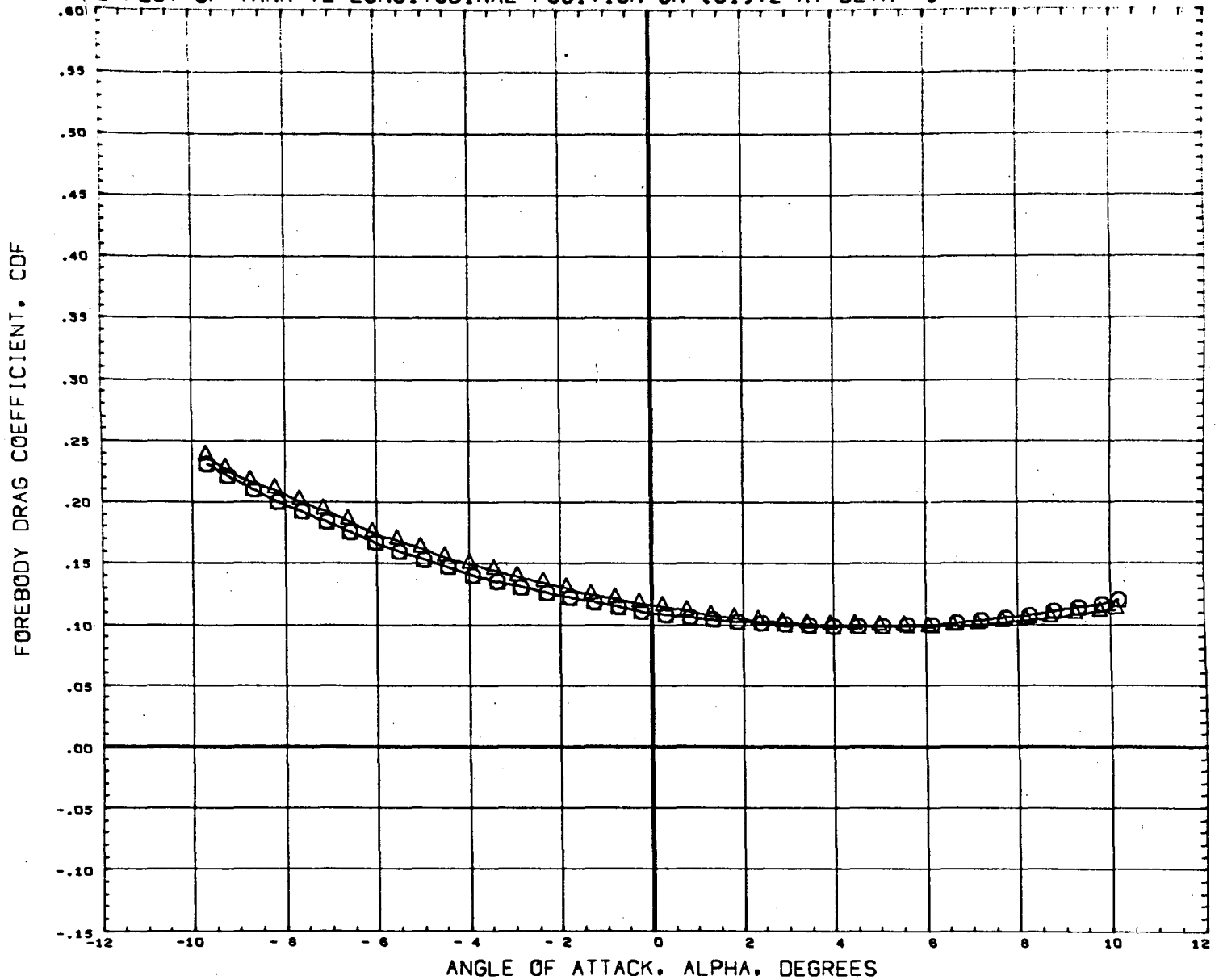
BETA ELEVTR AILRON RUDDER  
 0.000 0.000 0.000 0.000  
 0.000 0.000 0.000 0.000

REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA =0



DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
 (C07470)       MDAC S-222 COMPOSITE (T-CG) (O1)T2  
 (C07472)       MDAC S-222 COMPOSITE (T-CG) (O1)T2A

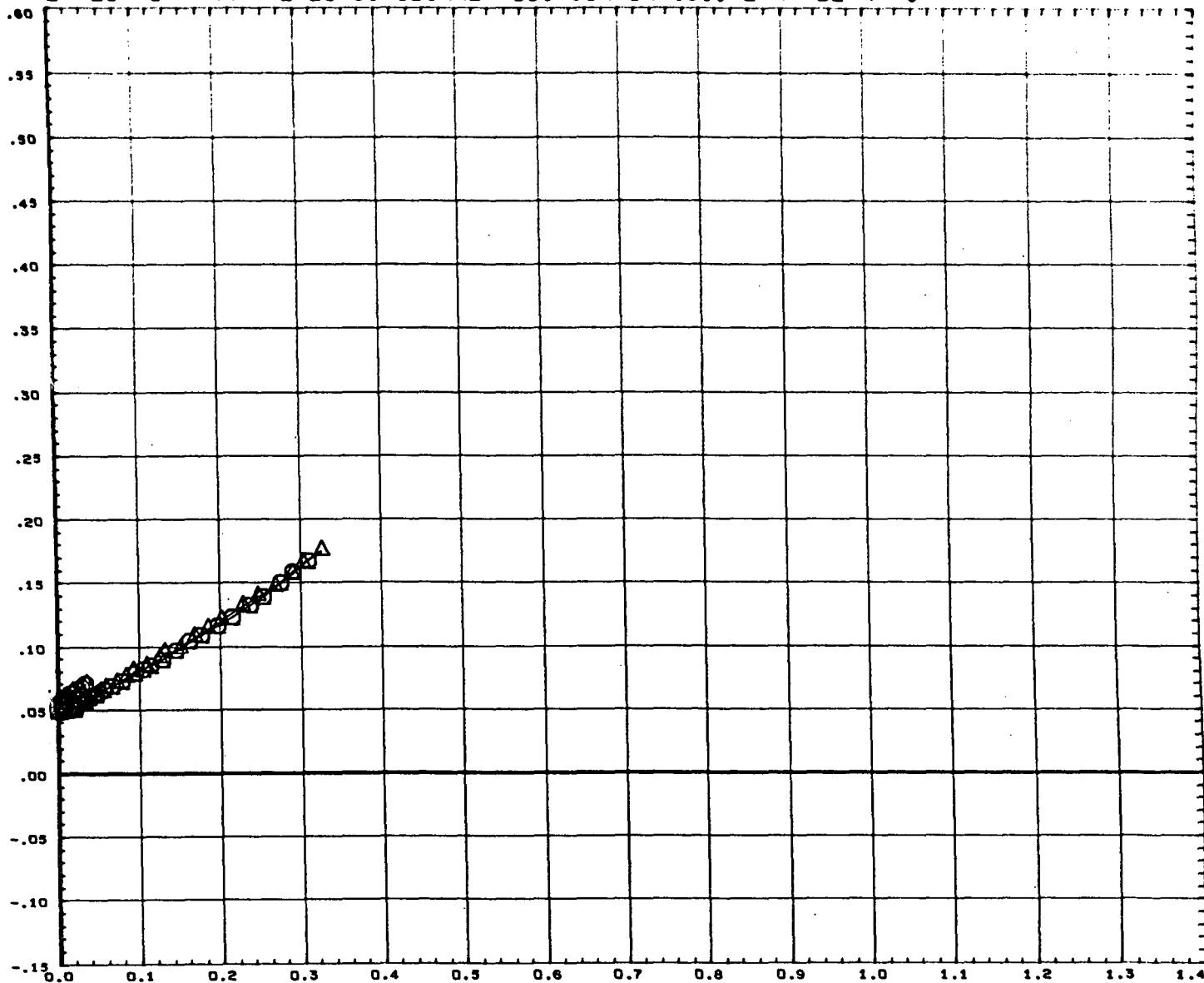
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRF	557.0004 IN.
				YMRF	0.0000 IN.
				ZMRF	200.0004 IN.
				SCALE	0.0060

MACH        1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA =0

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQ

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7470)  MDAC S-222 COMPOSITE (T-CG) (O1)T2  
 (CD7472)  MDAC S-222 COMPOSITE (T-CG) (O1)T2A

BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

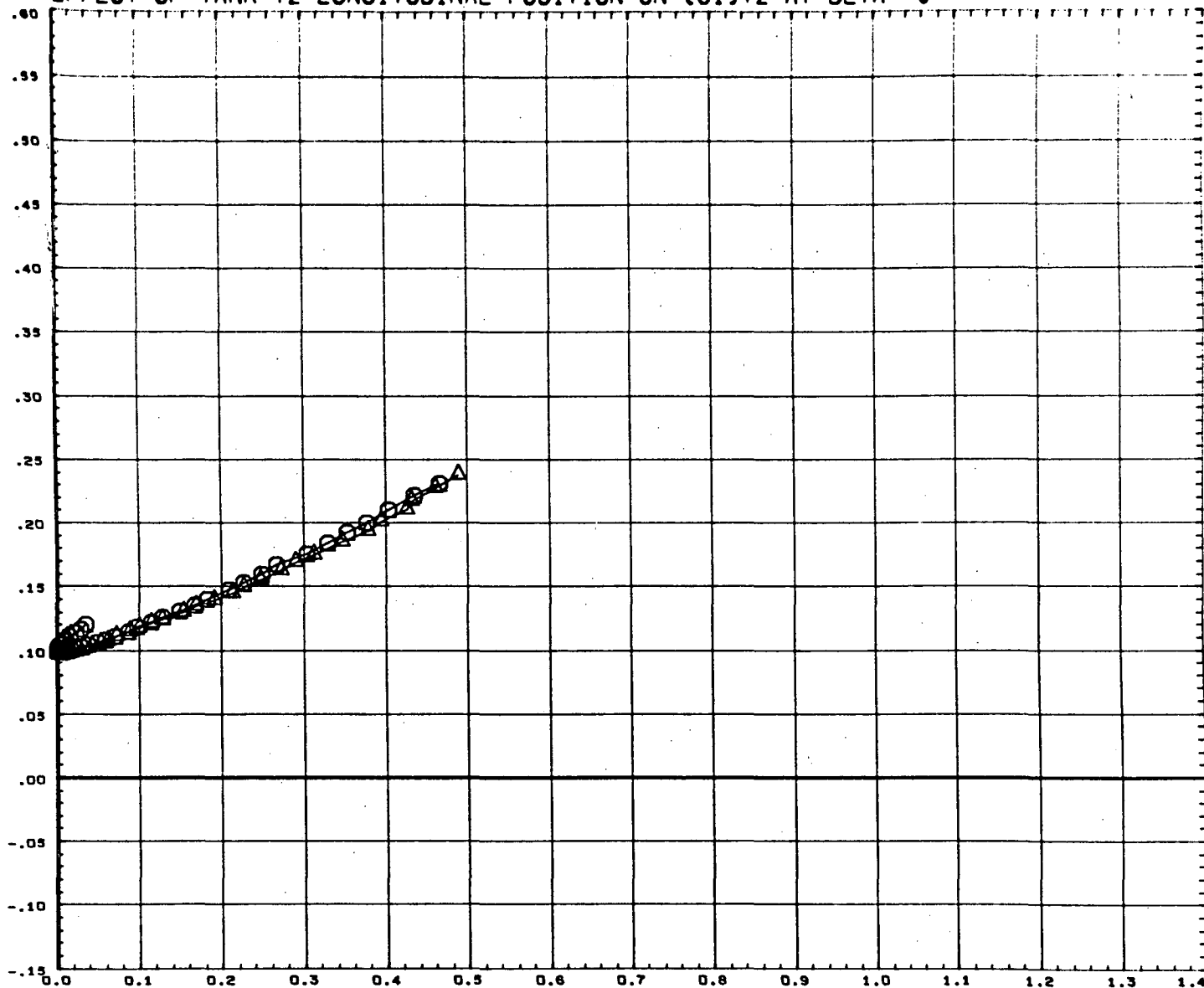
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .90



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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA =0

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQ

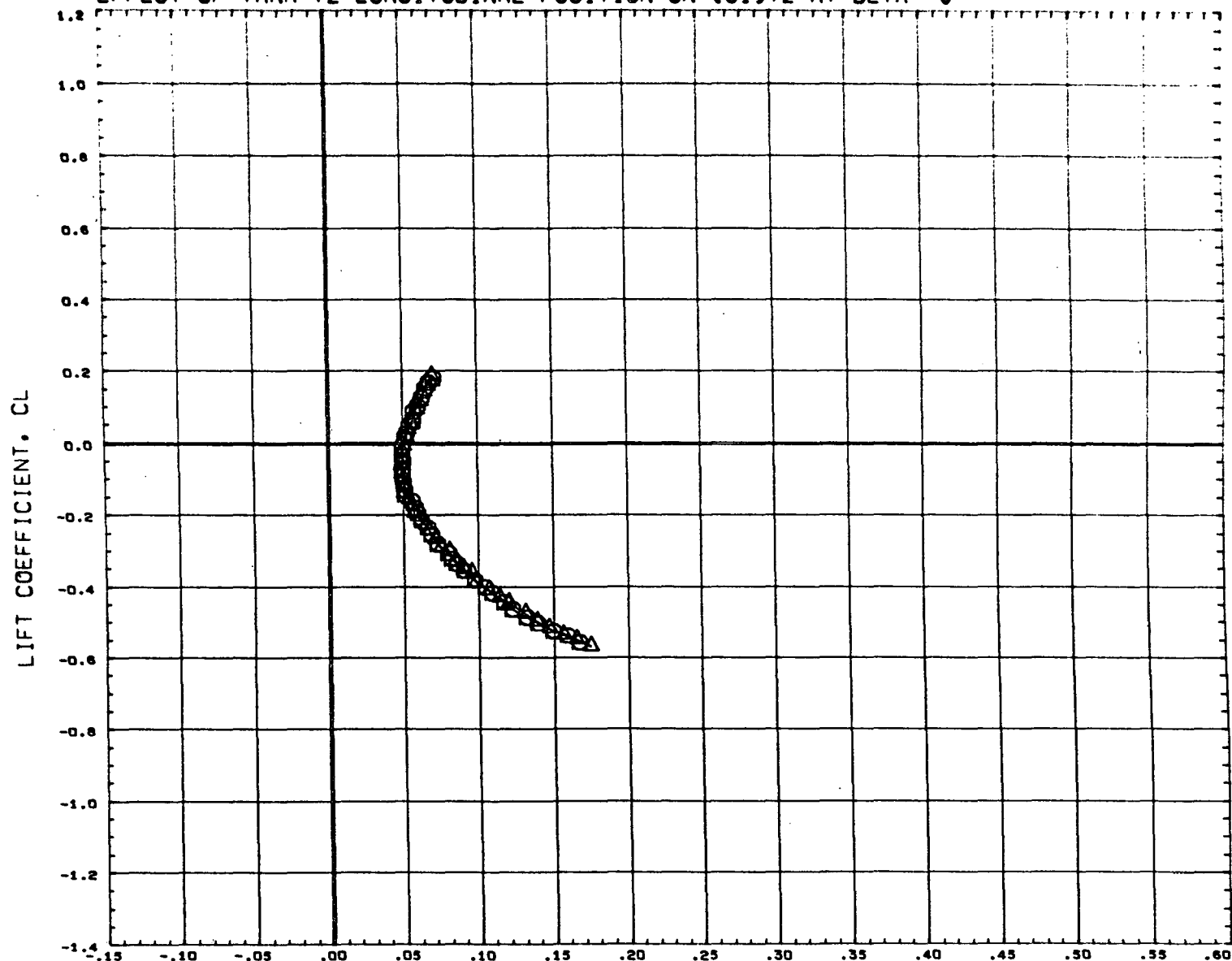
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7470) 	MDAC S-222 COMPOSITE (T-CG) (O1)T2
(CD7472) 	MDAC S-222 COMPOSITE (T-CG) (O1)T2A

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 1.09



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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 AT BETA =0



FOREBODY DRAG COEFFICIENT, CDF

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7470)  MDAC S-222 COMPOSITE (T-CG) (01)T2  
(CD7472)  MDAC S-222 COMPOSITE (T-CG) (01)T2A

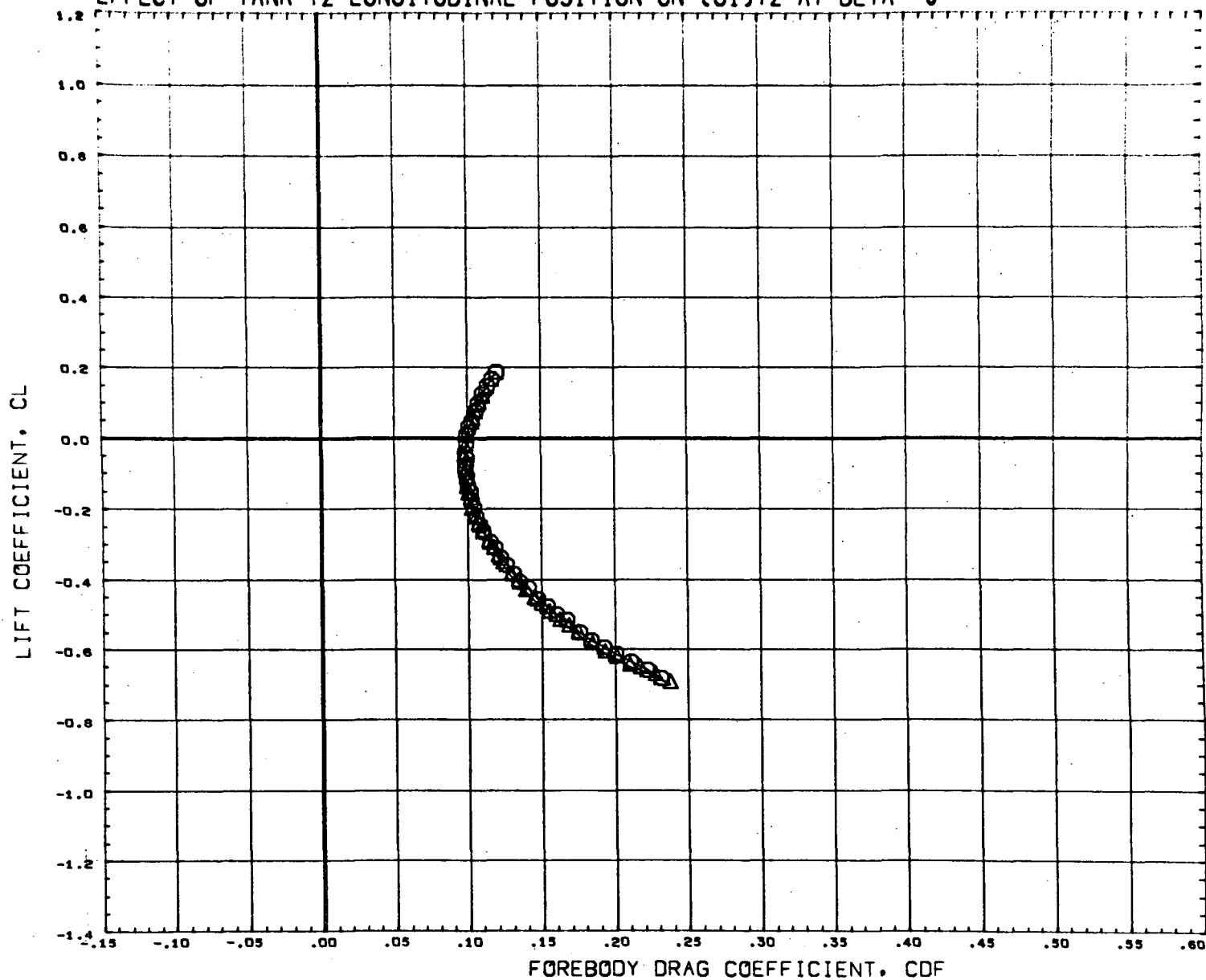
BETA	ELEVTR	ATLRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000



REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA = 0



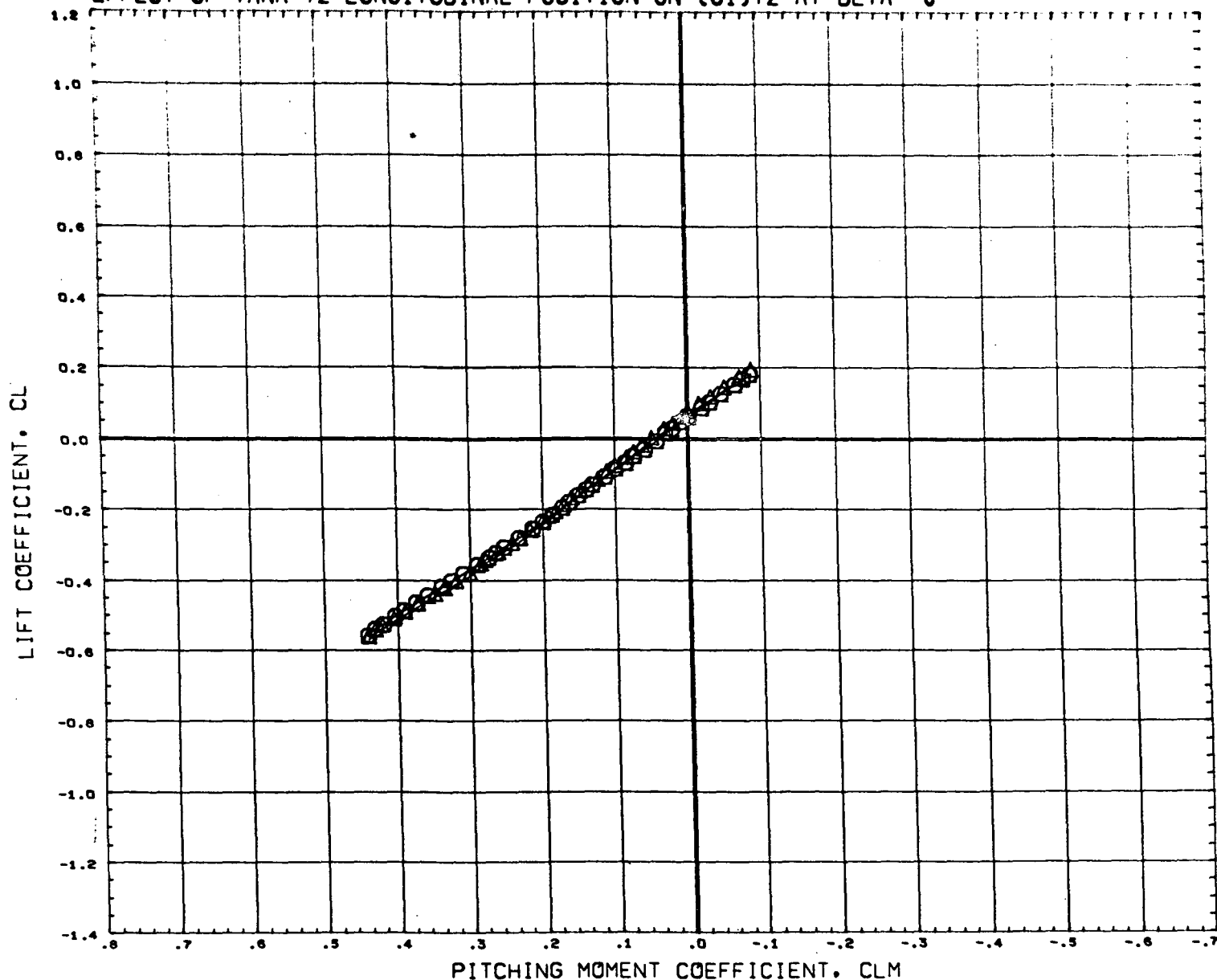
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7470)  MDAC S-222 COMPOSITE (T-CG) (O1)T2  
 (CD7472)  MDAC S-222 COMPOSITE (T-CG) (O1)T2A

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 AT BETA =0



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7470) MDAC S-222 COMPOSITE(T-CG) (O1)T2  
 (CD7472) MDAC S-222 COMPOSITE(T-CG) (O1)T2A

BETA ELEVTR AILRON RUDDER  
 0.000 0.000 0.000 0.000  
 0.000 0.000 0.000 0.000

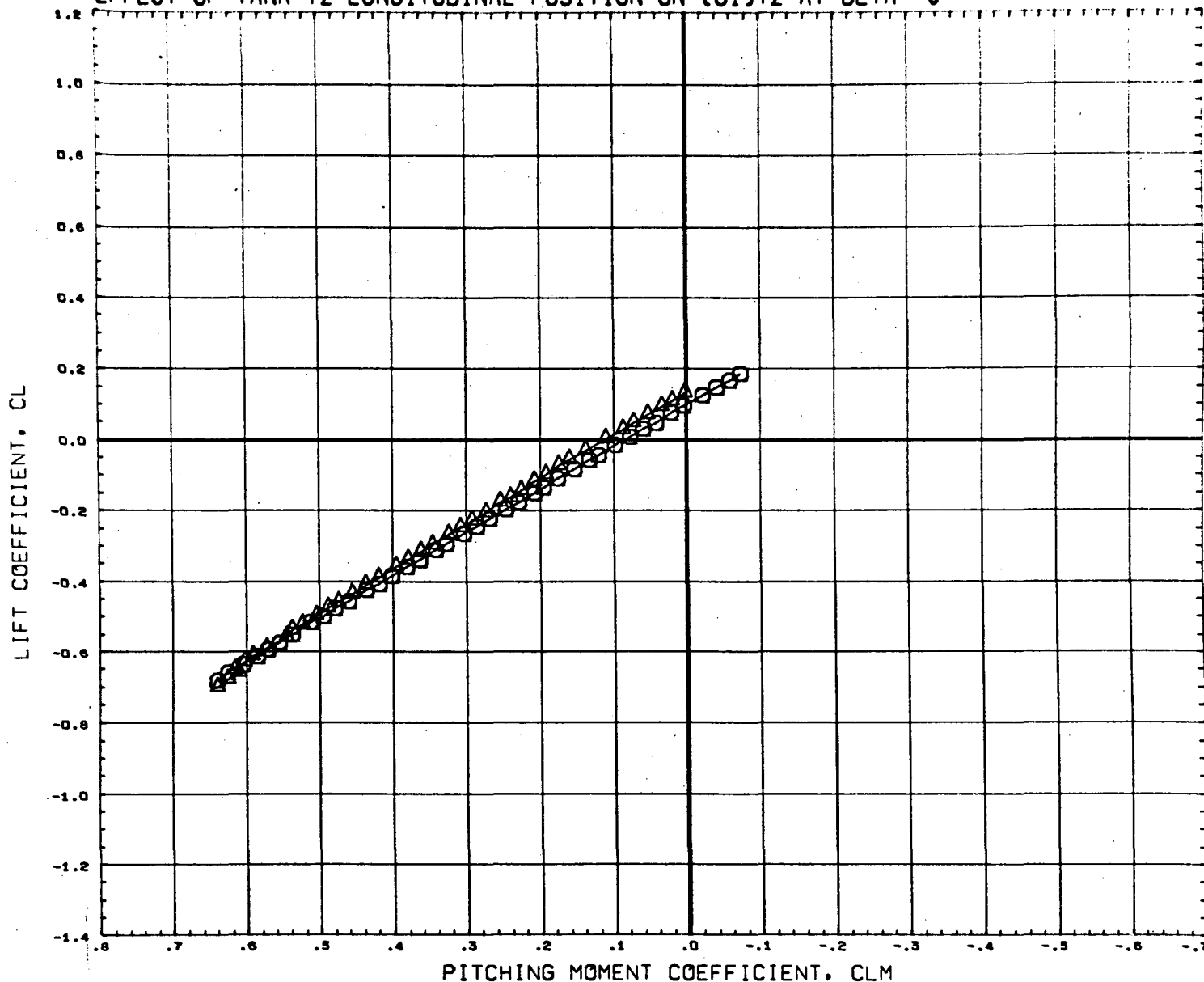
REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (C1)T2 AT BETA = 0



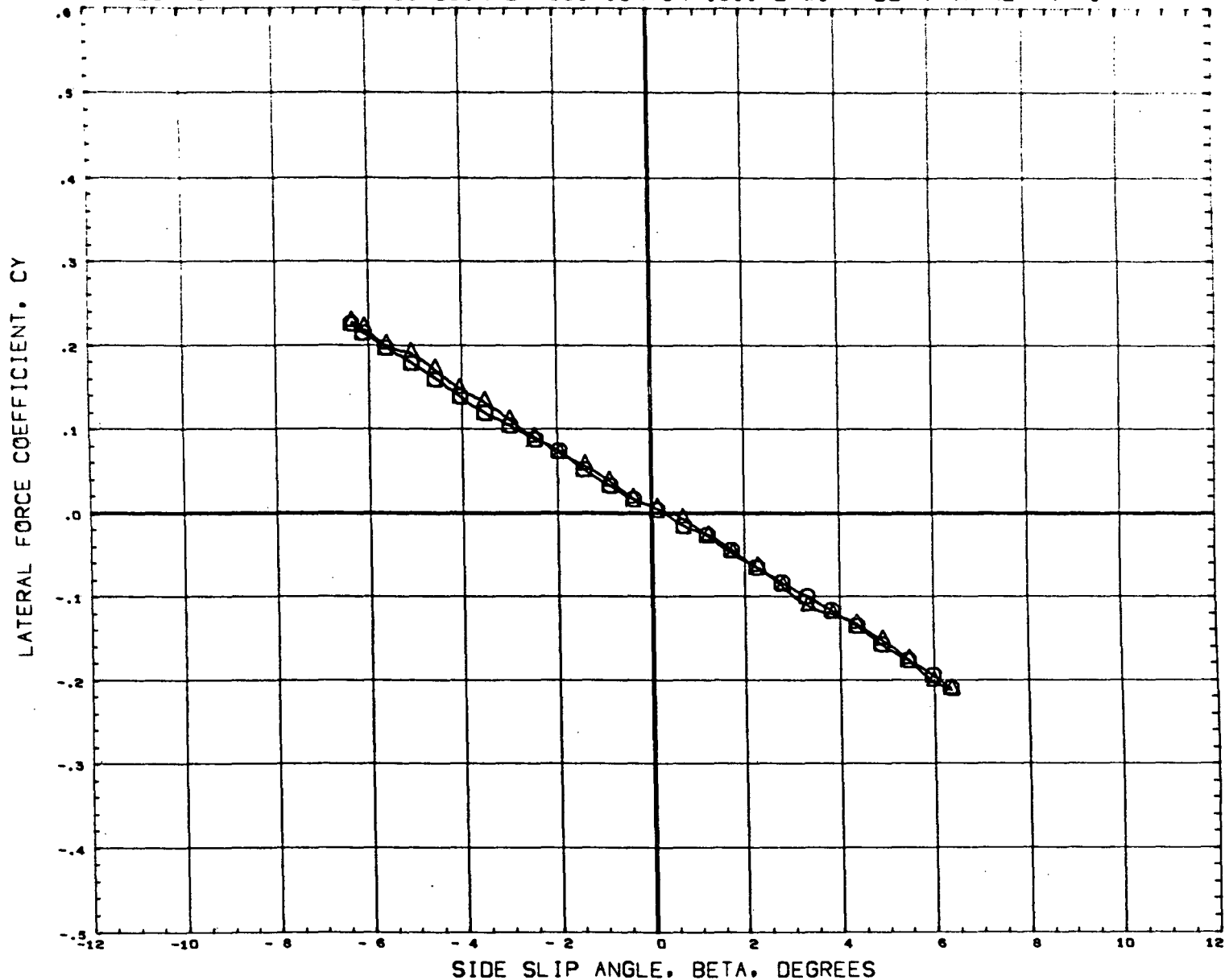
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7470)	MDAC S-222 COMPOSITE (T-CG) (C1)T2
(CD7472)	MDAC S-222 COMPOSITE (T-CG) (C1)T2A

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION
0.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF 609.5004 IN.
				BREF 882.0004 IN.
				XMRP 557.0004 IN.
				YMRP 0.0000 IN.
				ZMRP 200.0004 IN.
				SCALE 0.0060

MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 WITH BETA AT ALPHA =0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7471) MDAC S-222 COMPOSITE (T-CG) (O1) T2  
(RD7473) MDAC S-222 COMPOSITE (T-CG) (O1) T2A

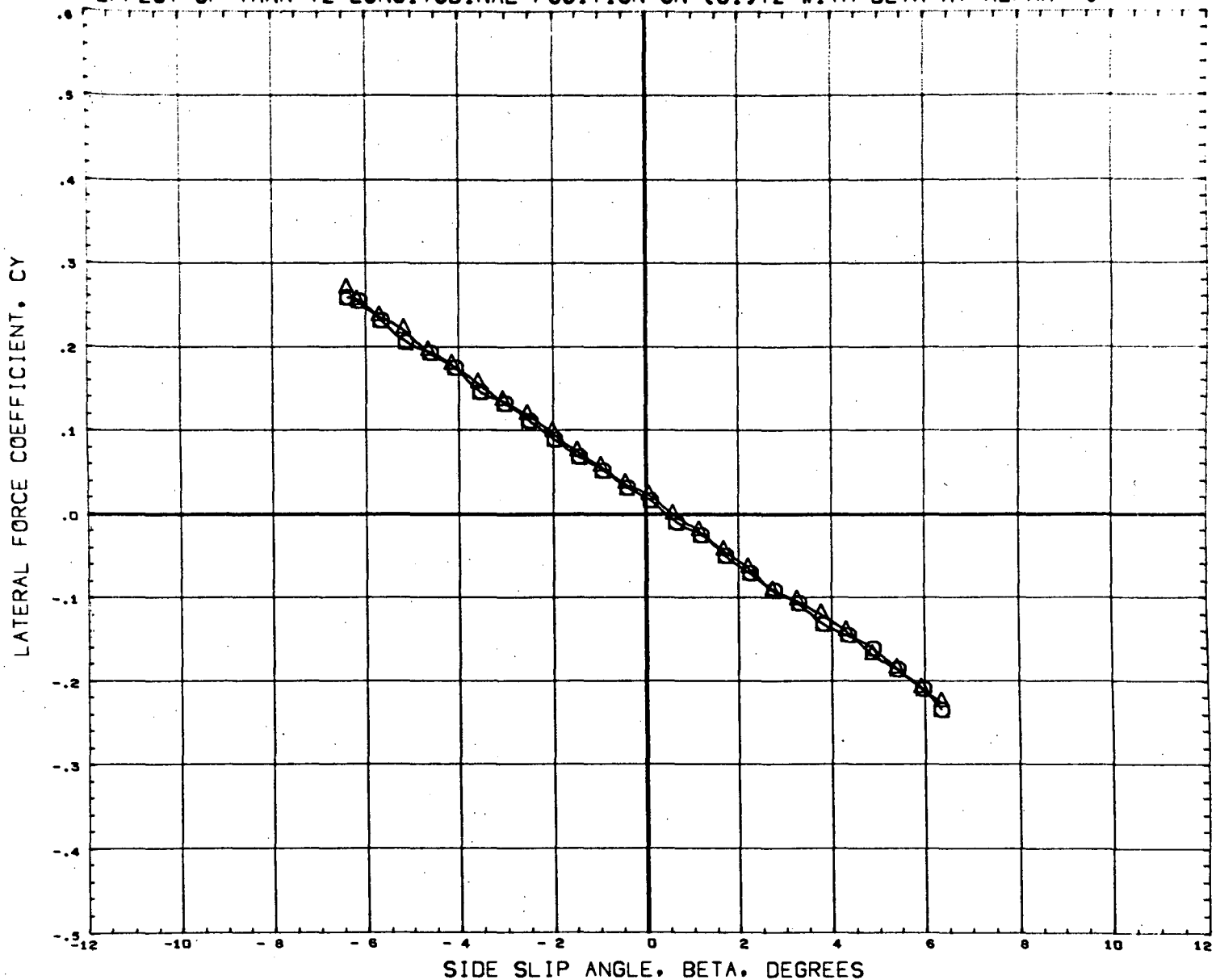
ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 WITH BETA AT ALPHA = 0



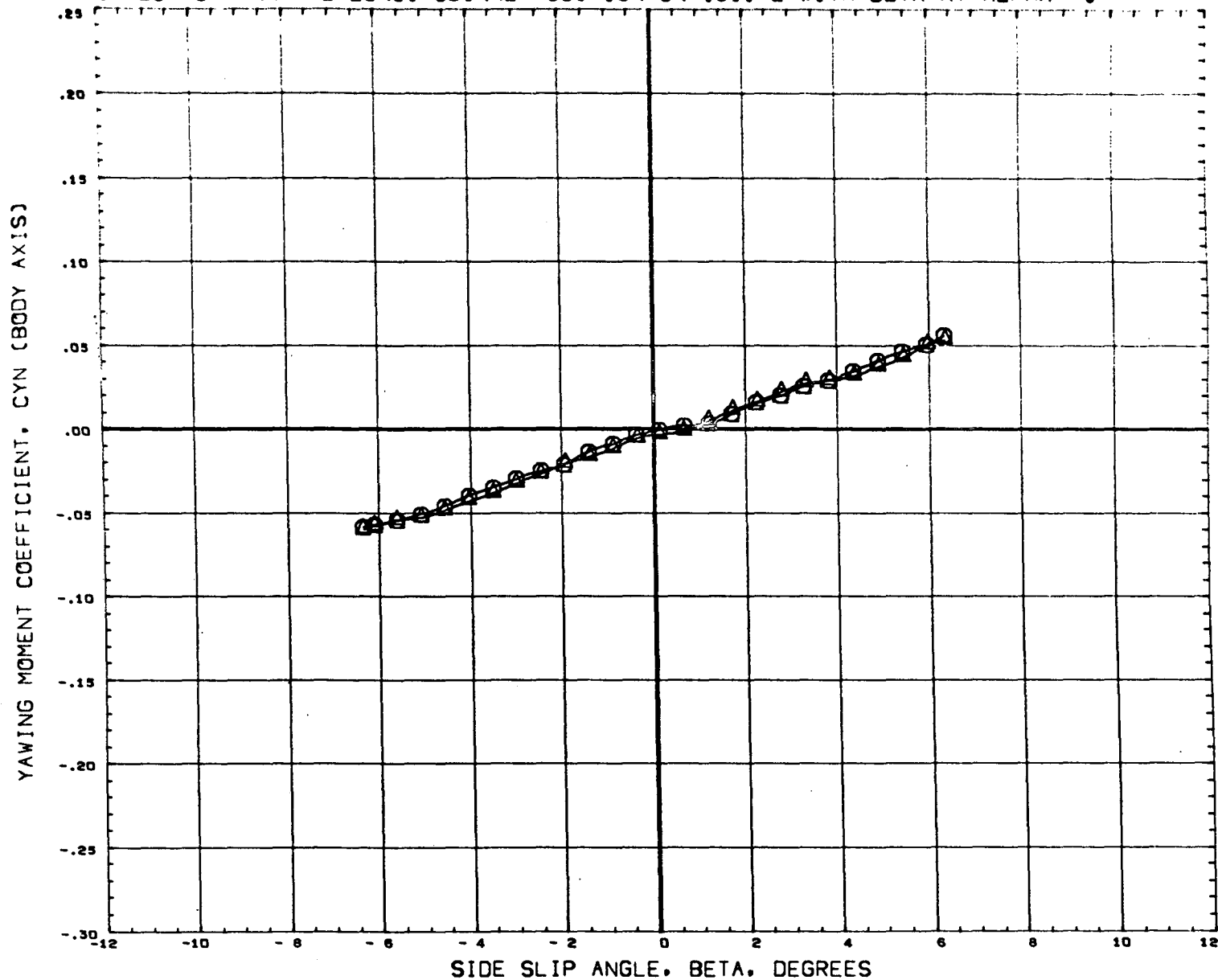
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
(RD7471)  $\bigcirc$  MDAC S-222 COMPOSITE (T-CG) (01)T2  
(RD7473)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (01)T2A

ALPHA	ELEVTR	ATLRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				YMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060



MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 WITH BETA AT ALPHA =0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7471)  MDAC S-222 COMPOSITE (T-CG) (O1)T2  
 (RD7473)  MDAC S-222 COMPOSITE (T-CG) (O1)T2A

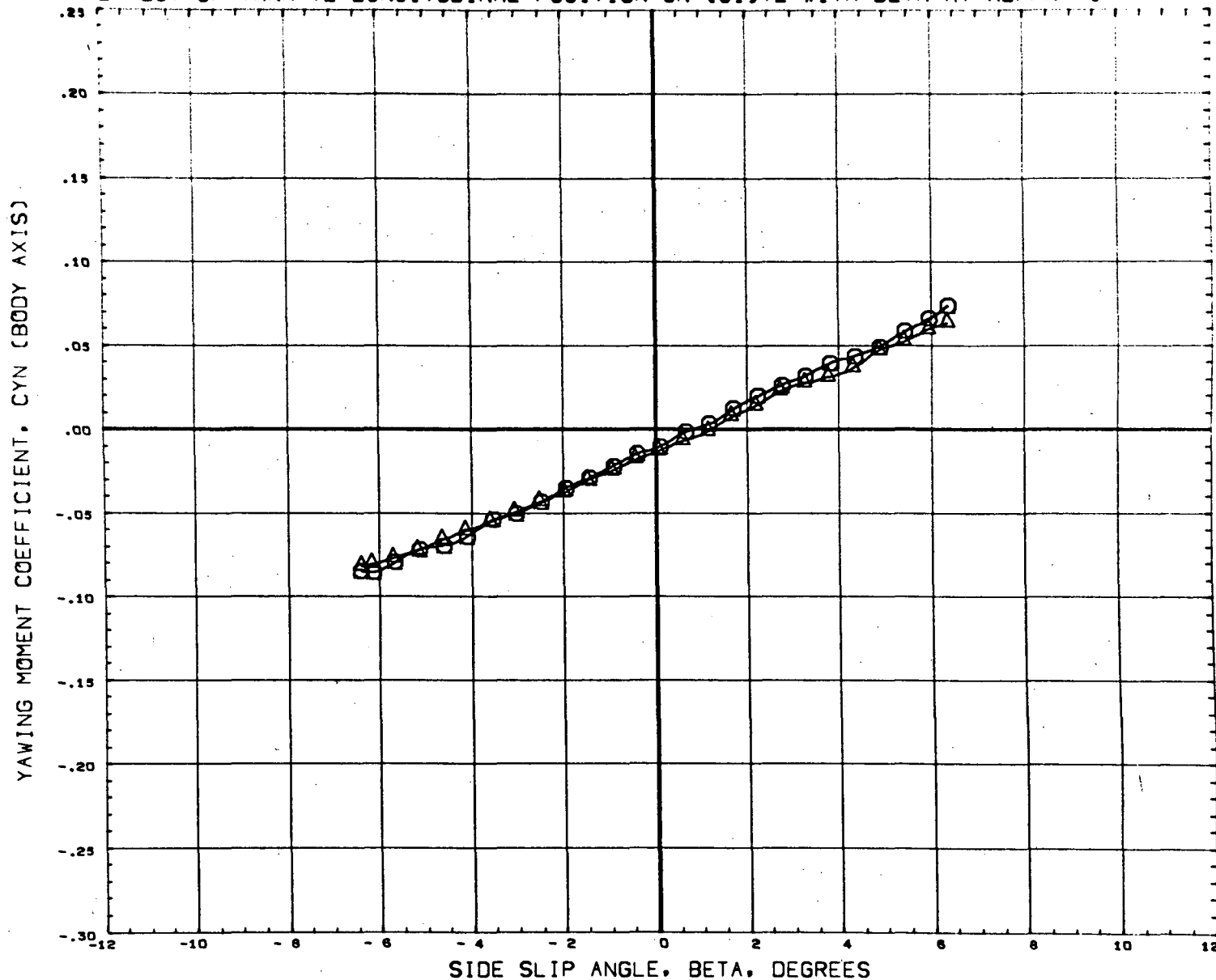
ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
YMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 WITH BETA AT ALPHA = 0



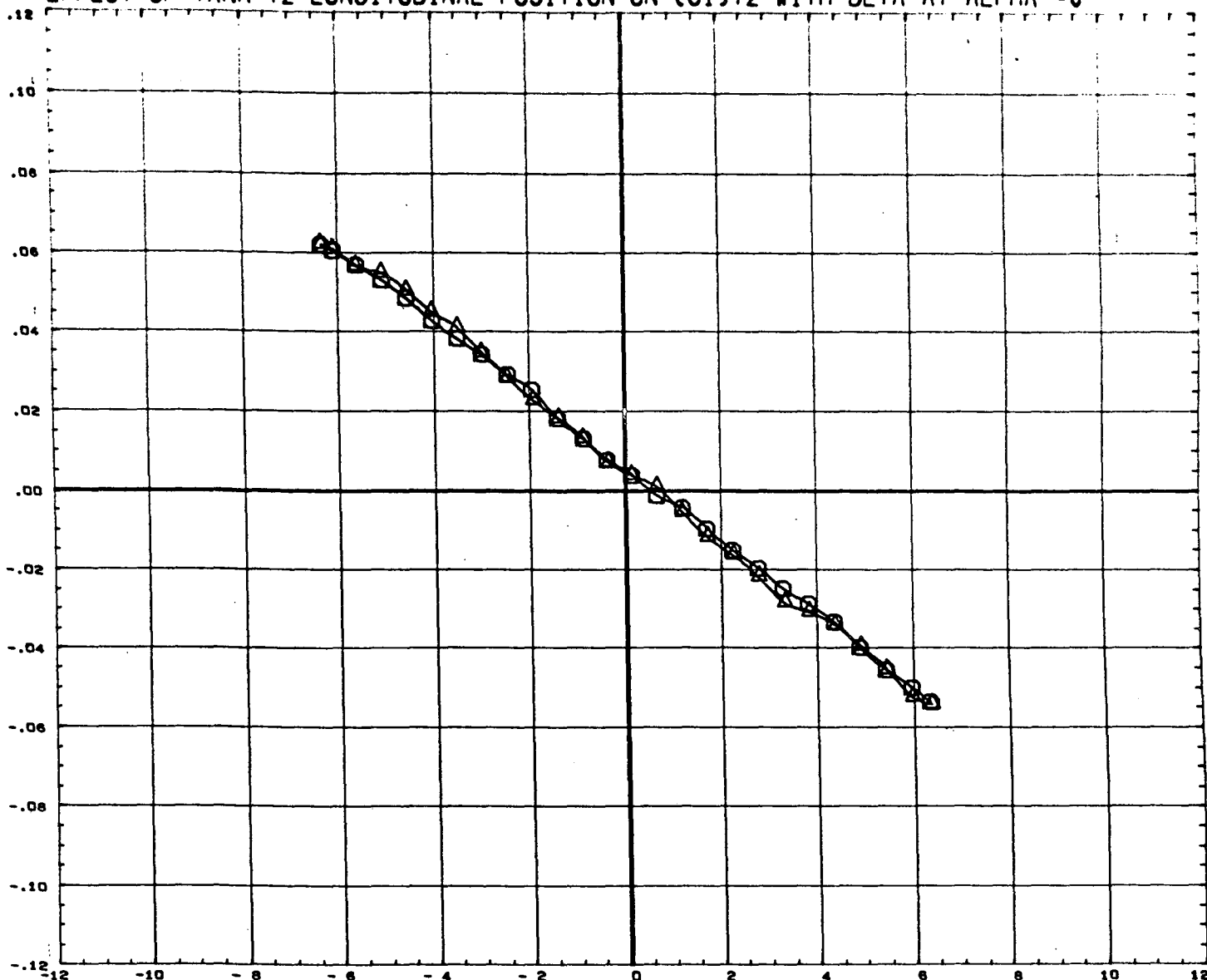
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7471)	MDAC S-222 COMPOSITE(T-CG) (01)T2	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7473)	MDAC S-222 COMPOSITE(T-CG) (01)T2A	0.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 WITH BETA AT ALPHA =0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

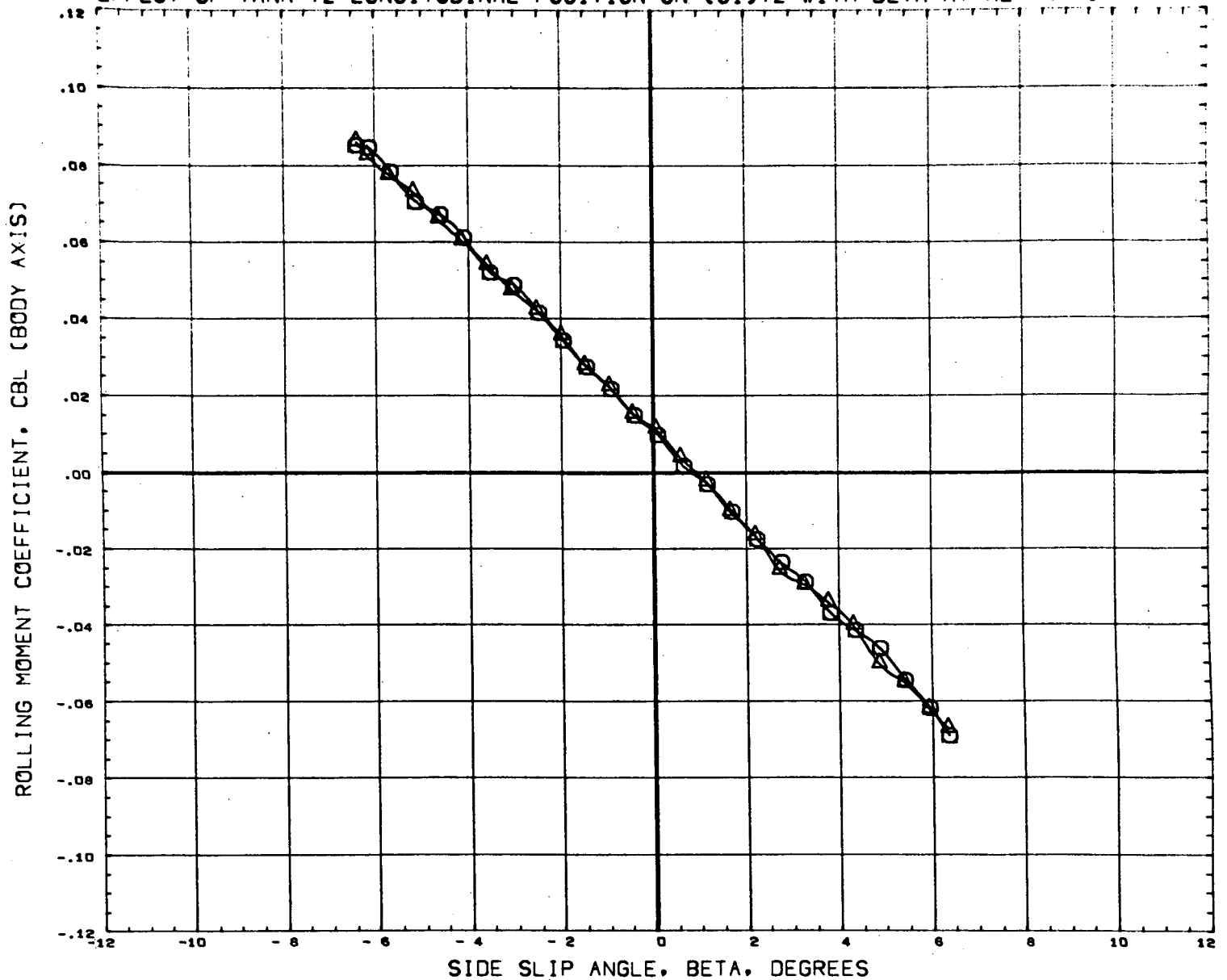
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
(RD7471) (O) MDAC S-222 COMPOSITE (T-CG) (O1) T2  
(RD7473) (Δ) MDAC S-222 COMPOSITE (T-CG) (O1) T2A

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XM RP	557.0004 IN.
				YM RP	0.0000 IN.
				ZM RP	200.0004 IN.
				SCALE	0.0060

MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 WITH BETA AT ALPHA =0



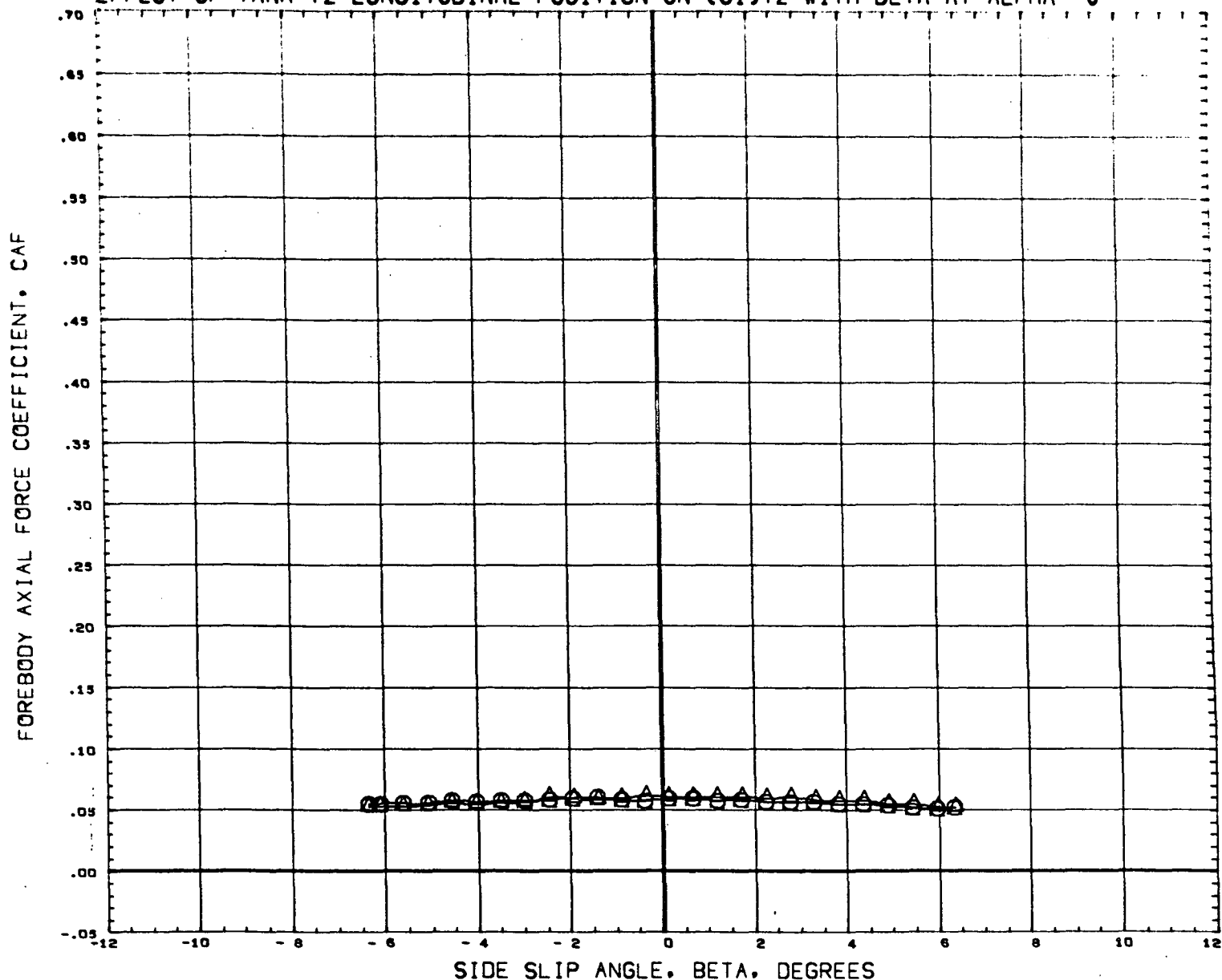
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (R07471) MDAC S-222 COMPOSITE (T-CG) (01)T2  
 (R07473) MDAC S-222 COMPOSITE (T-CG) (01)T2A

ALPHA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
0.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
0.000	0.000	0.000	0.000	LREF	609.5004	IN.
				BREF	882.0004	IN.
				XMRP	557.0004	IN.
				YMRP	0.0000	IN.
				ZMRP	200.0004	IN.
				SCALE	0.0060	

MACH 1.09

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (01)T2 WITH BETA AT ALPHA = 0



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7471)  $\bigcirc$  MDAC S-222 COMPOSITE (T-CG) (01)T2  
 (RD7473)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (01)T2A

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

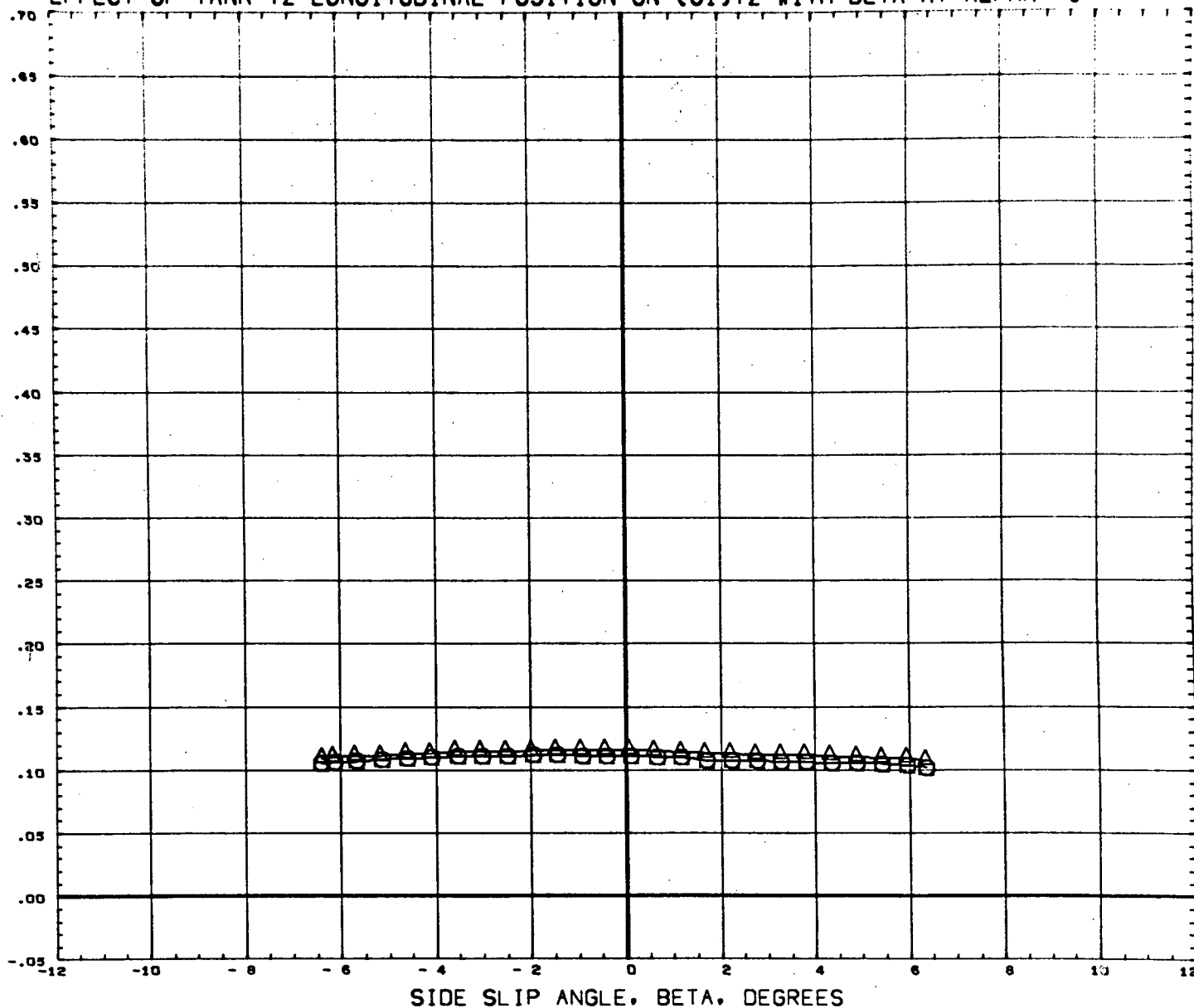
MACH .90

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# EFFECT OF TANK T2 LONGITUDINAL POSITION ON (O1)T2 WITH BETA AT ALPHA =0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7471)  $\square$  MDAC S-222 COMPOSITE (T-CG) (O1) T2  
 (RD7473)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (O1) T2A

ALPHA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000

REFERENCE INFORMATION

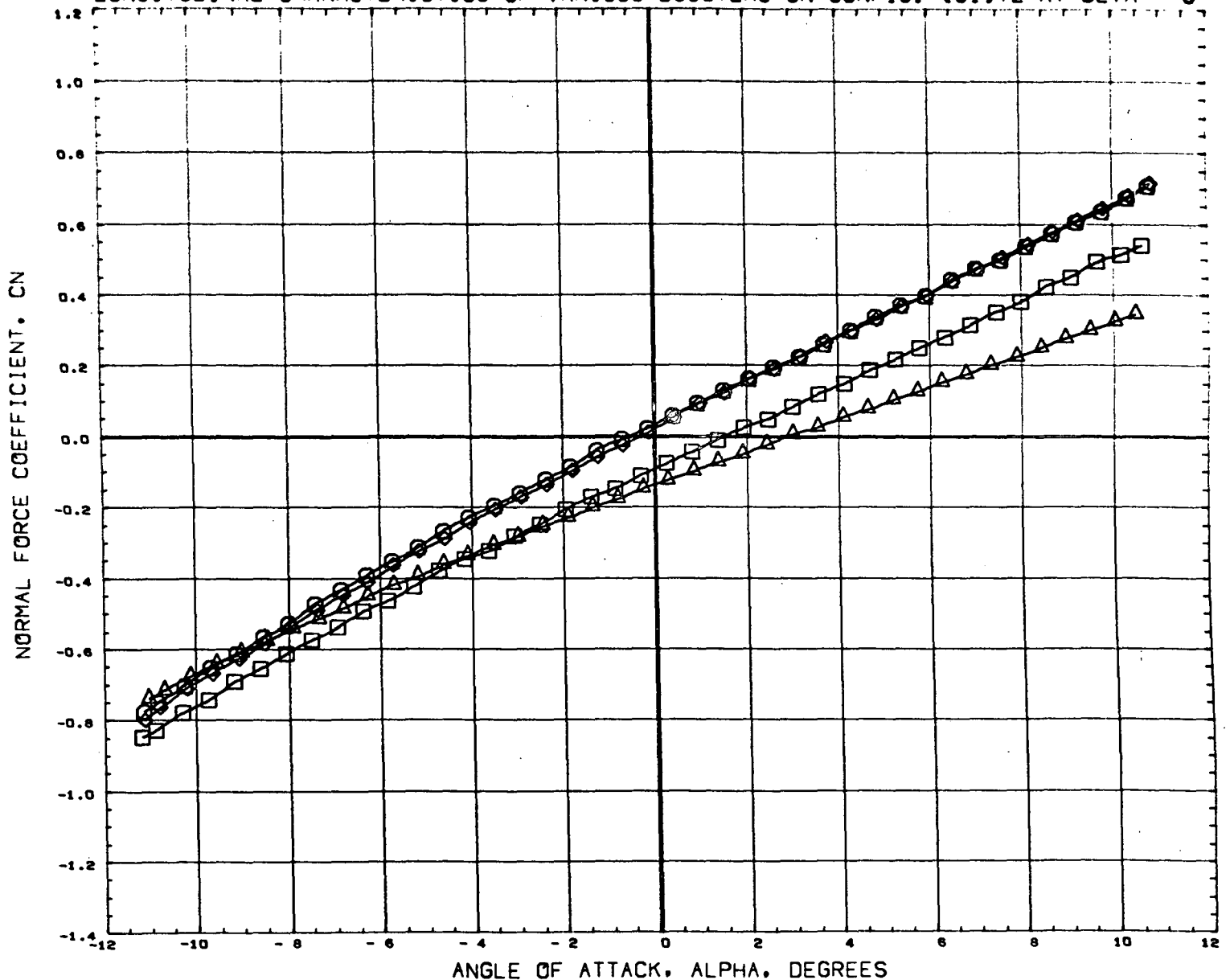
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	537.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MACH

1.09

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6



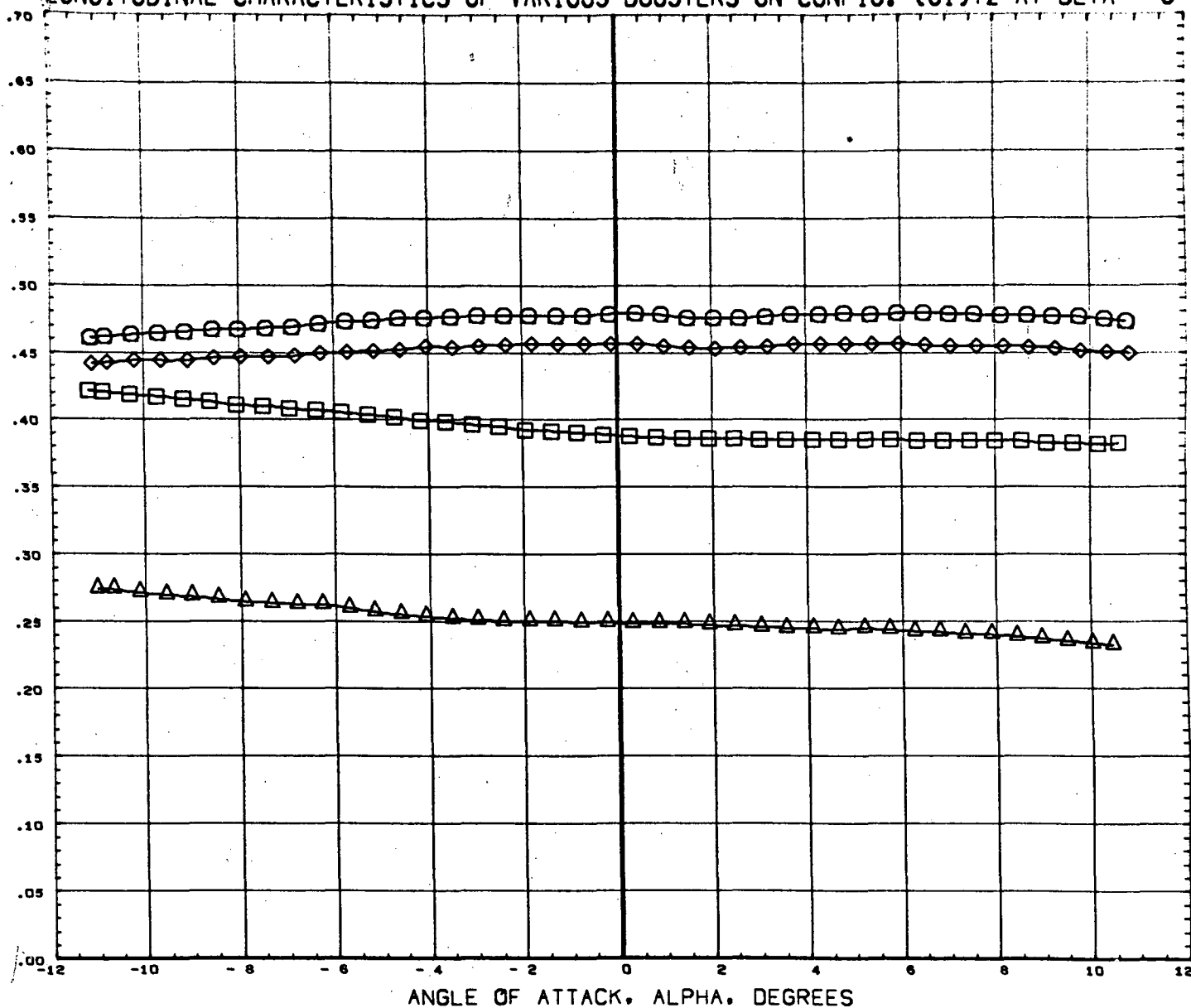
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
(CD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3	6.000	0.000	0.000	0.000	BREF	882.0004 IN.
(CD7456)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4	6.000	0.000	0.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6

AXIAL FORCE COEFFICIENT, CA



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7452) MDAC S-222 COMPOSITE (T-CG) (01) T2B1  
 (CD7454) MDAC S-222 COMPOSITE (T-CG) (01) T2B2  
 (CD7455) MDAC S-222 COMPOSITE (T-CG) (01) T2B3  
 (CD7456) MDAC S-222 COMPOSITE (T-CG) (01) T2B4

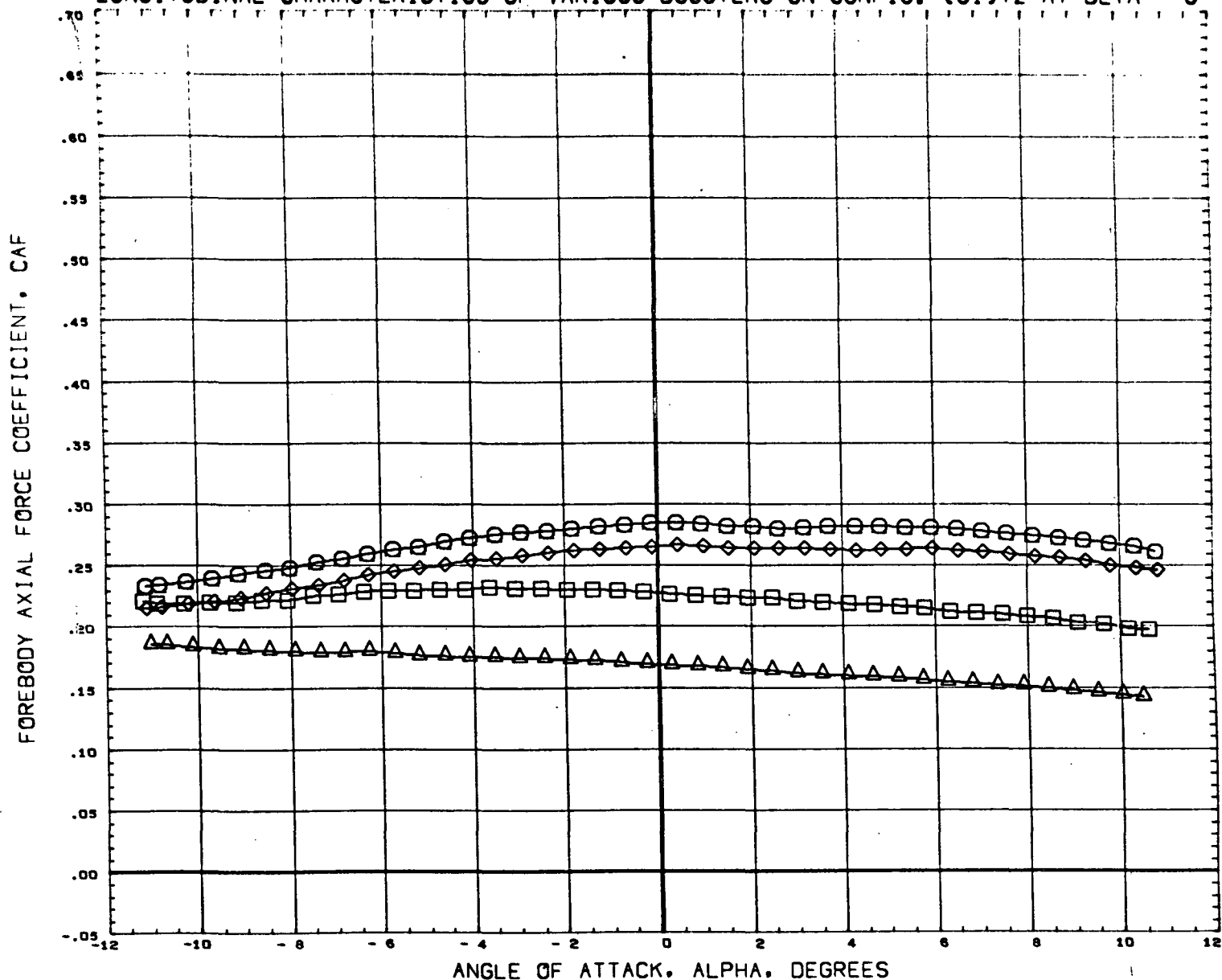
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
6.000	0.000	0.000	0.000	BREF	882.0004 IN.
6.000	0.000	0.000	0.000	XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
(CD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3	6.000	0.000	0.000	0.000	BREF	882.0004 IN.
(CD7458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4	6.000	0.000	0.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

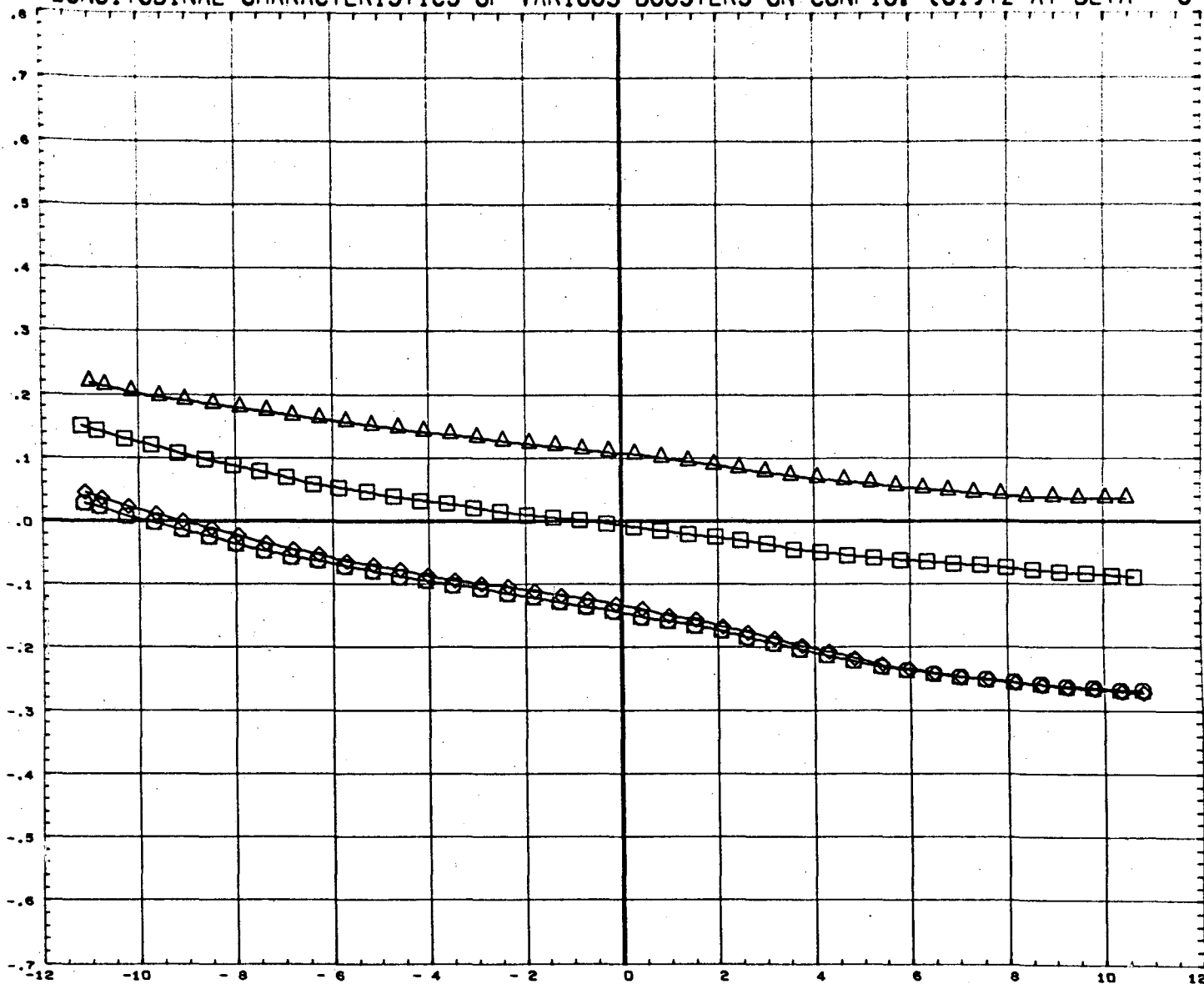
MACH

1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6

PITCHING MOMENT COEFFICIENT, CLM



ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
(CD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3	6.000	0.000	0.000	0.000	BREF	882.0004 IN.
(CD7458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4	6.000	0.000	0.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

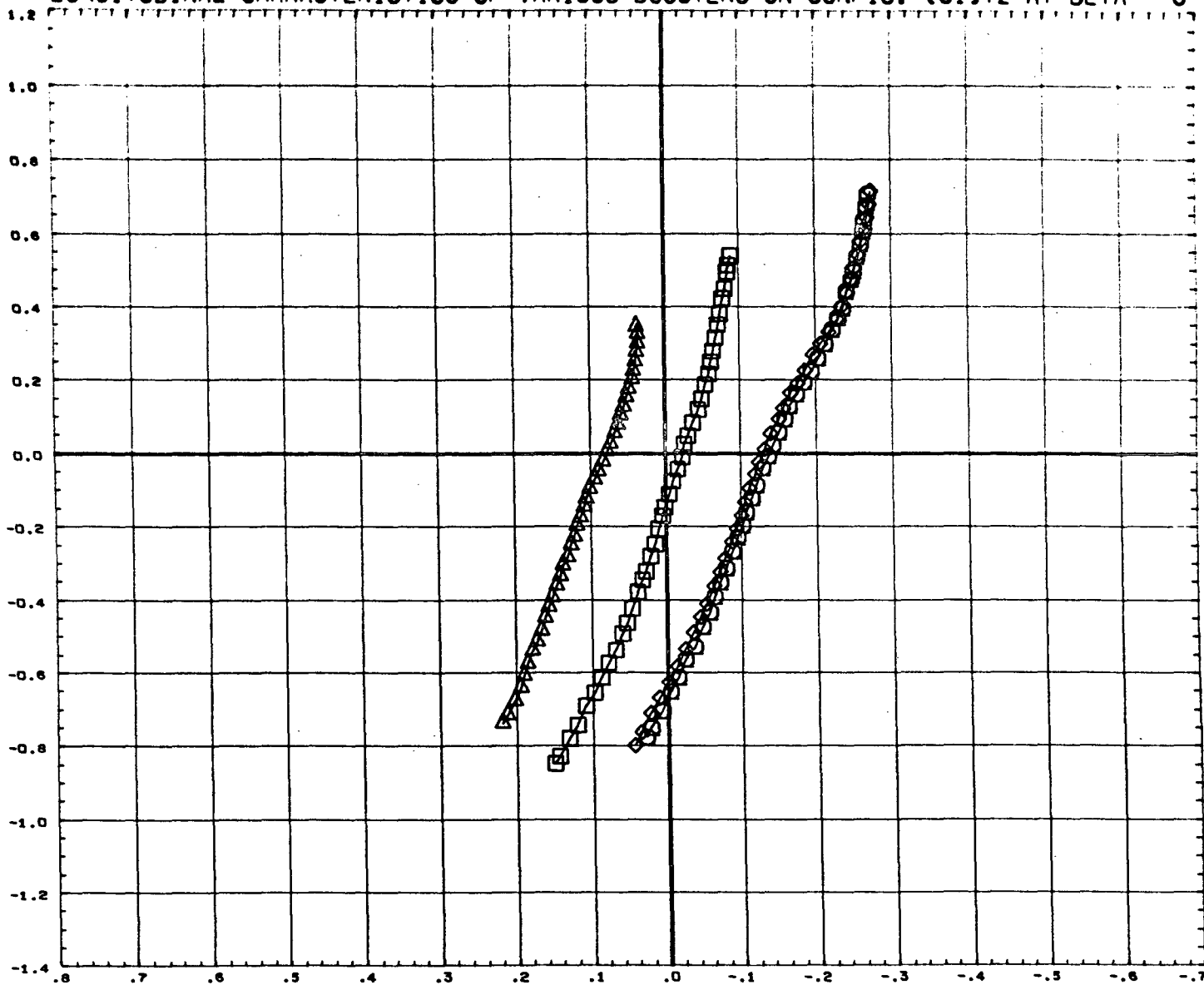
MACH

1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6

NORMAL FORCE COEFFICIENT, CN



PITCHING MOMENT COEFFICIENT, CLM

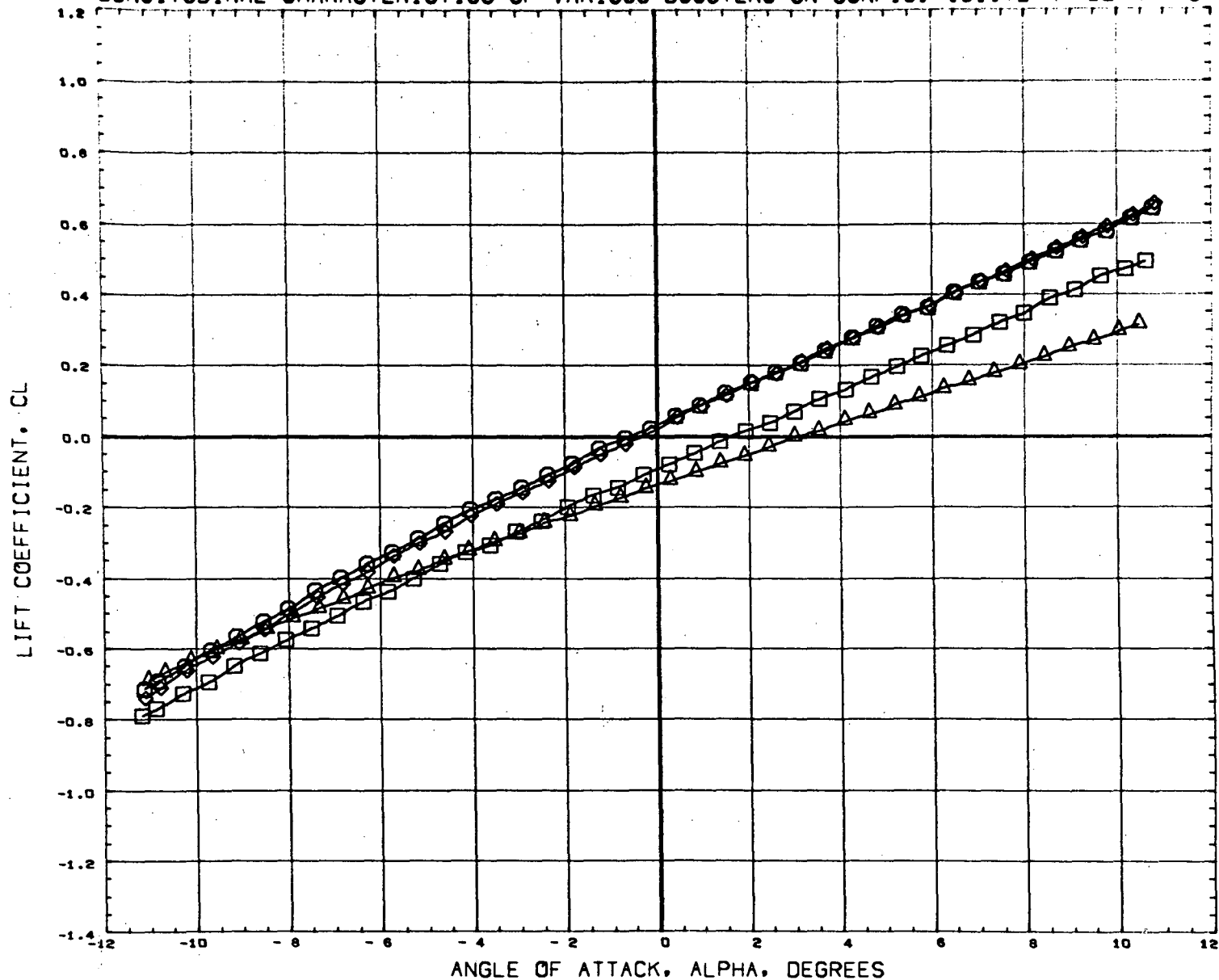
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
(CD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3	6.000	0.000	0.000	0.000	BREF	882.0004 IN.
(CD7458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4	6.000	0.000	0.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1
(CD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2
(CD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3
(CD7458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4

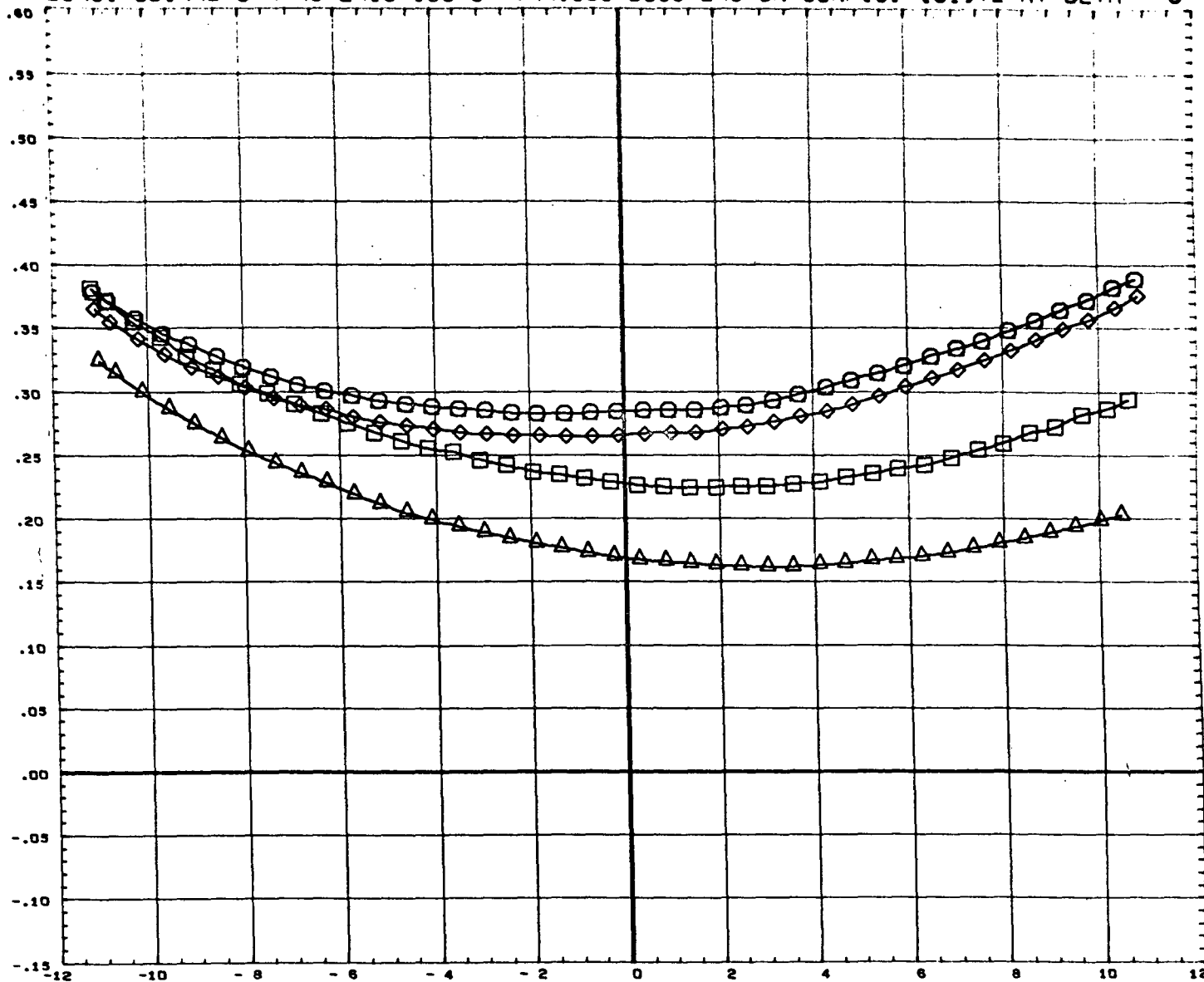
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
6.000	0.000	0.000	0.000	BREF	882.0004 IN.
6.000	0.000	0.000	0.000	XMPP	557.0004 IN.
				YMPP	0.0000 IN.
				ZMPP	200.0004 IN.
				SCALE	0.0060

MACH 1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6

FOREBODY DRAG COEFFICIENT, CDF



ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
(CD7452)	MDAC S-222 COMPOSITE (T-CG) (01)T2B1	6.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
(CD7454)	MDAC S-222 COMPOSITE (T-CG) (01)T2B2	6.000	0.000	0.000	0.000	LREF	609.5004	IN.
(CD7455)	MDAC S-222 COMPOSITE (T-CG) (01)T2B3	6.000	0.000	0.000	0.000	SREF	882.0004	IN.
(CD7458)	MDAC S-222 COMPOSITE (T-CG) (01)T2B4	6.000	0.000	0.000	0.000	XMRP	557.0004	IN.
						YMRP	0.0000	IN.
						ZMRP	200.0004	IN.
						SCALE	0.0060	

MACH

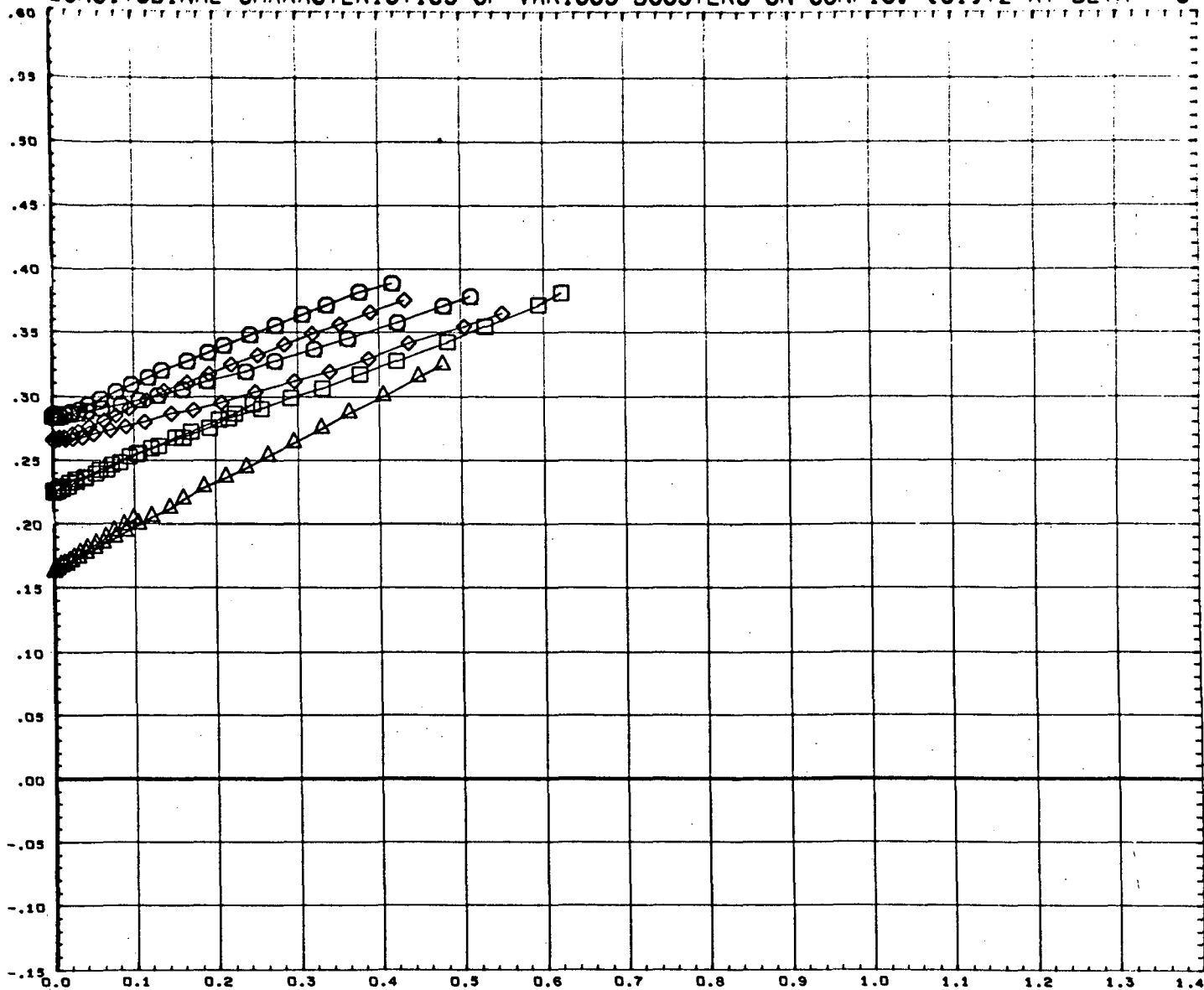
1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQ

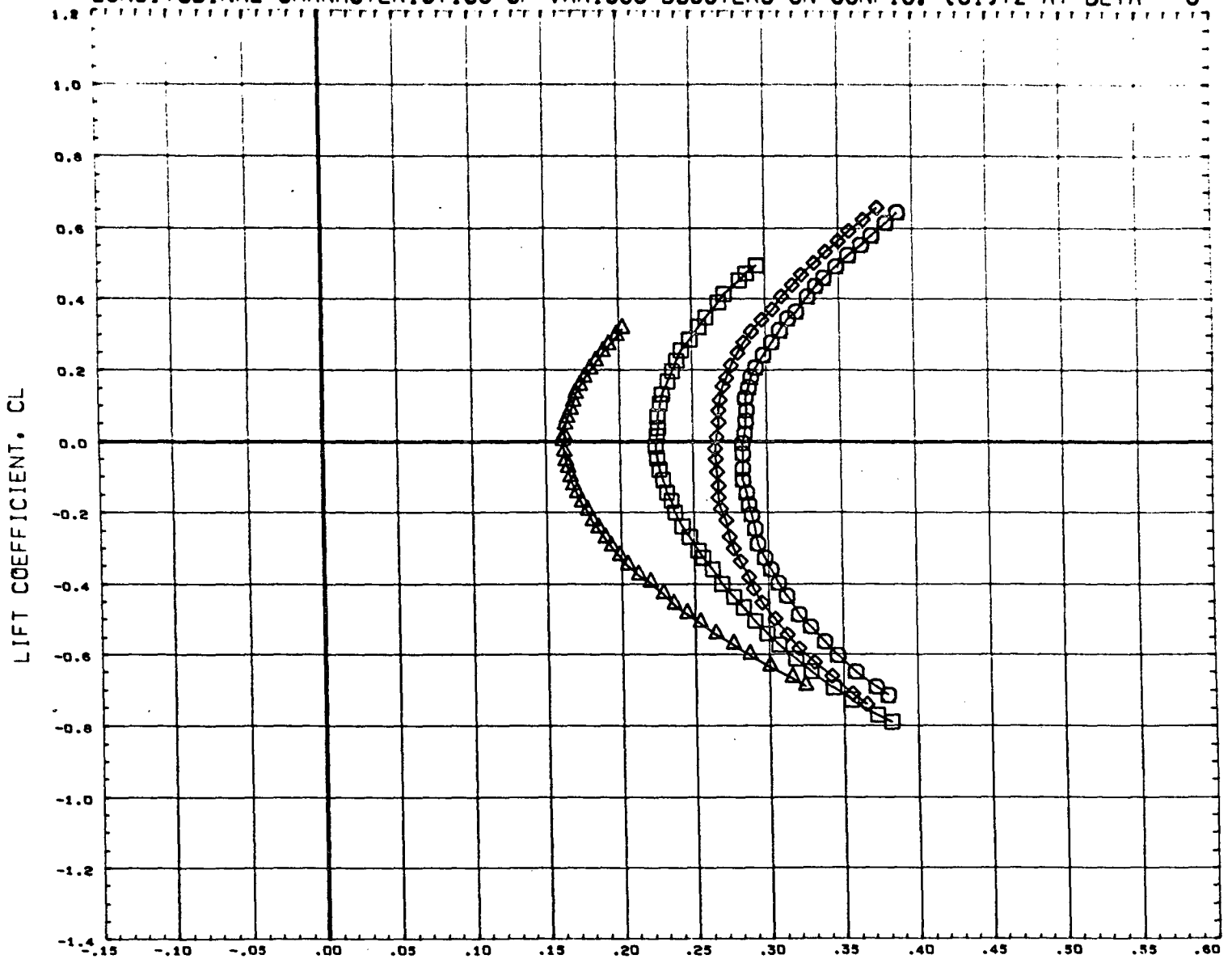
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(C07452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1
(C07454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2
(C07455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3
(C07458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION
6.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF 609.5004 IN.
6.000	0.000	0.000	0.000	BREF 882.0004 IN.
6.000	0.000	0.000	0.000	XMRP 557.0004 IN.
				YMRP 0.0000 IN.
				ZMRP 200.0004 IN.
				SCALE 0.0060

MACH 1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1
(CD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2
(CD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3
(CD7459)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4

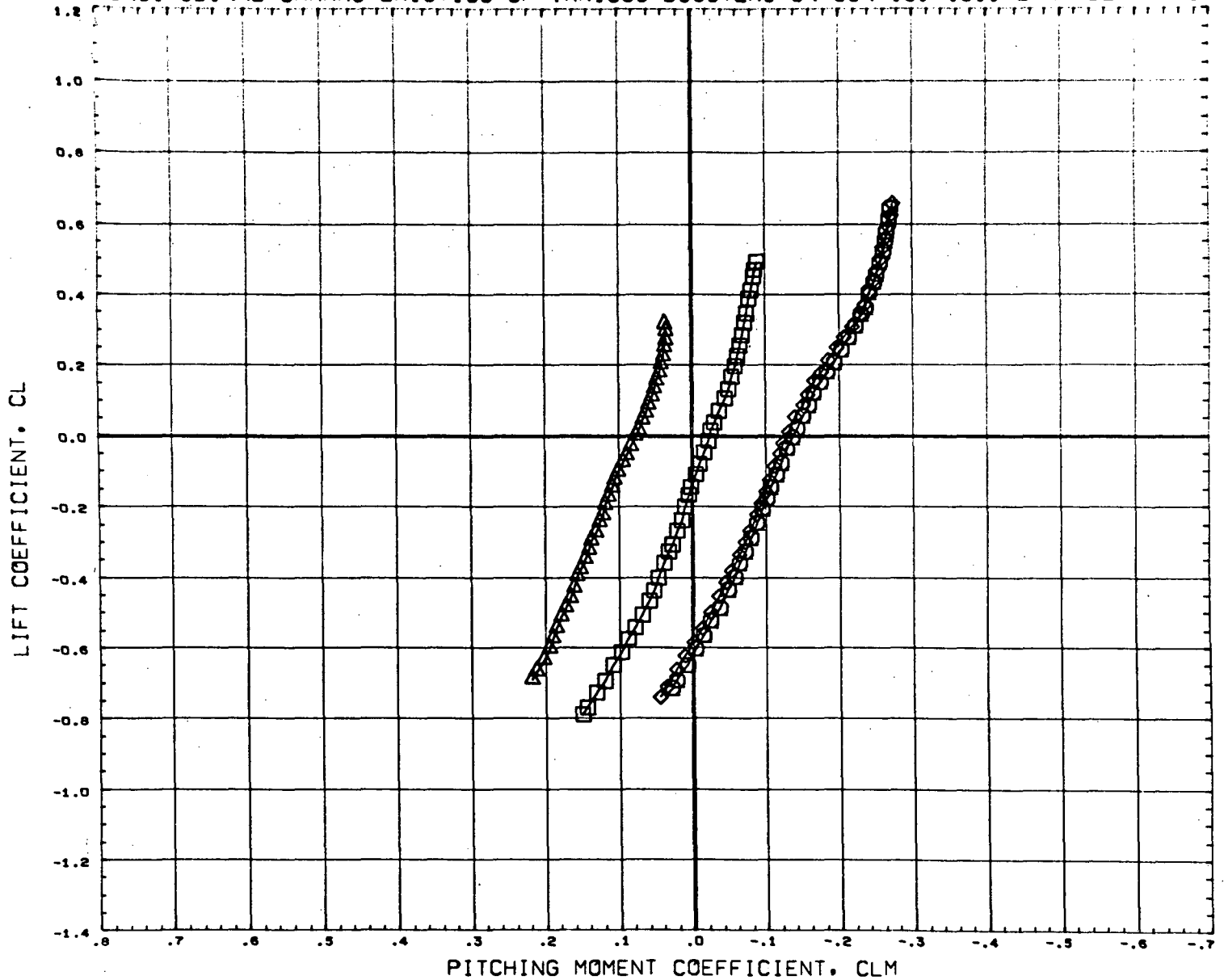
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
6.000	0.000	0.000	0.000	BREF	882.0004 IN.
6.000	0.000	0.000	0.000	XMRF	557.0004 IN.
				YMRF	0.0000 IN.
				ZMRF	200.0004 IN.
				SCALE	0.0060

MACH

1.51

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# LONGITUDINAL CHARACTERISTICS OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6

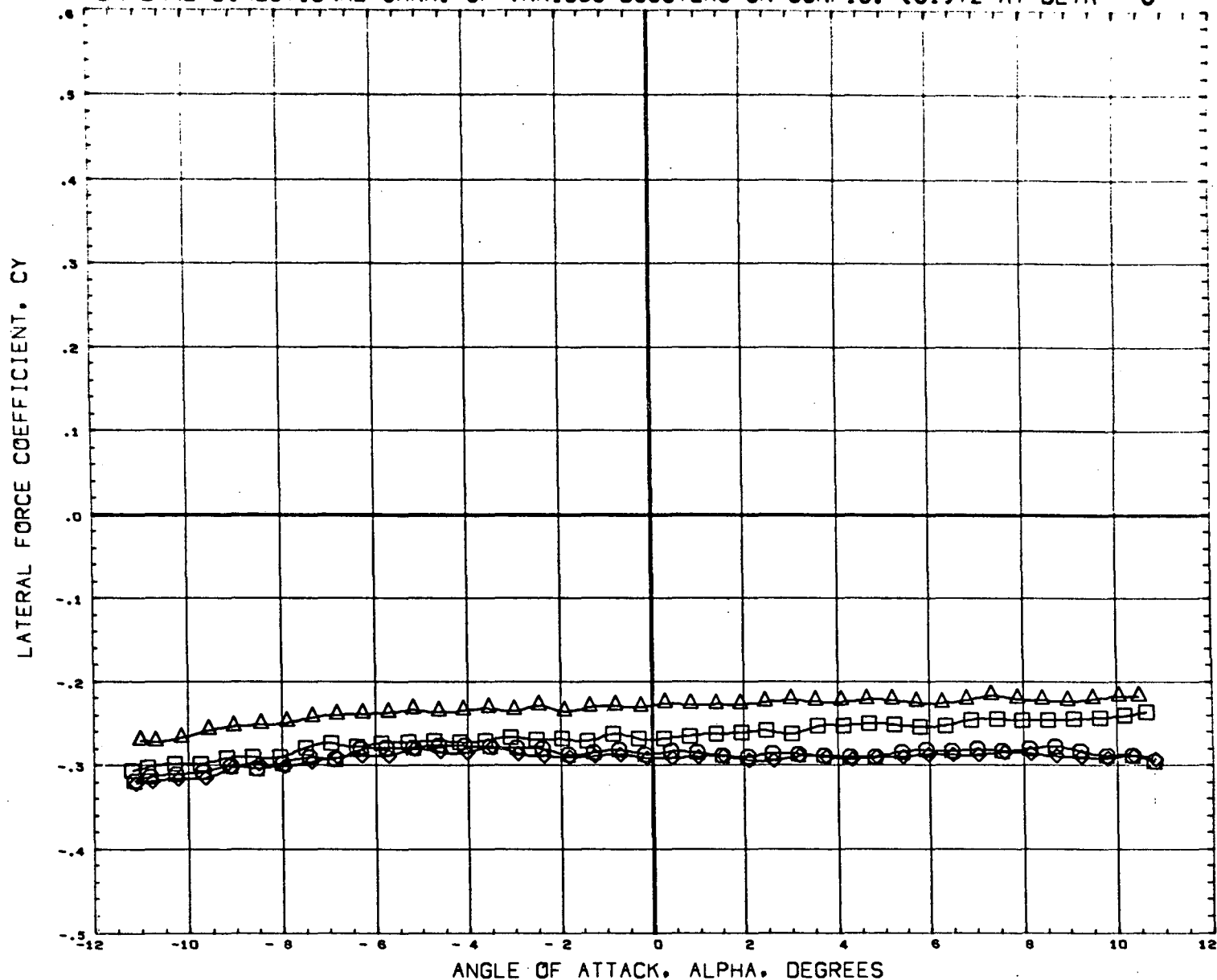


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	ATLRON	RUDDER	REFERENCE INFORMATION	
(CD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
(CD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3	6.000	0.000	0.000	0.000	BREF	882.0004 IN.
(CD7458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4	6.000	0.000	0.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LATERAL-DIRECTIONAL CHAR. OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6



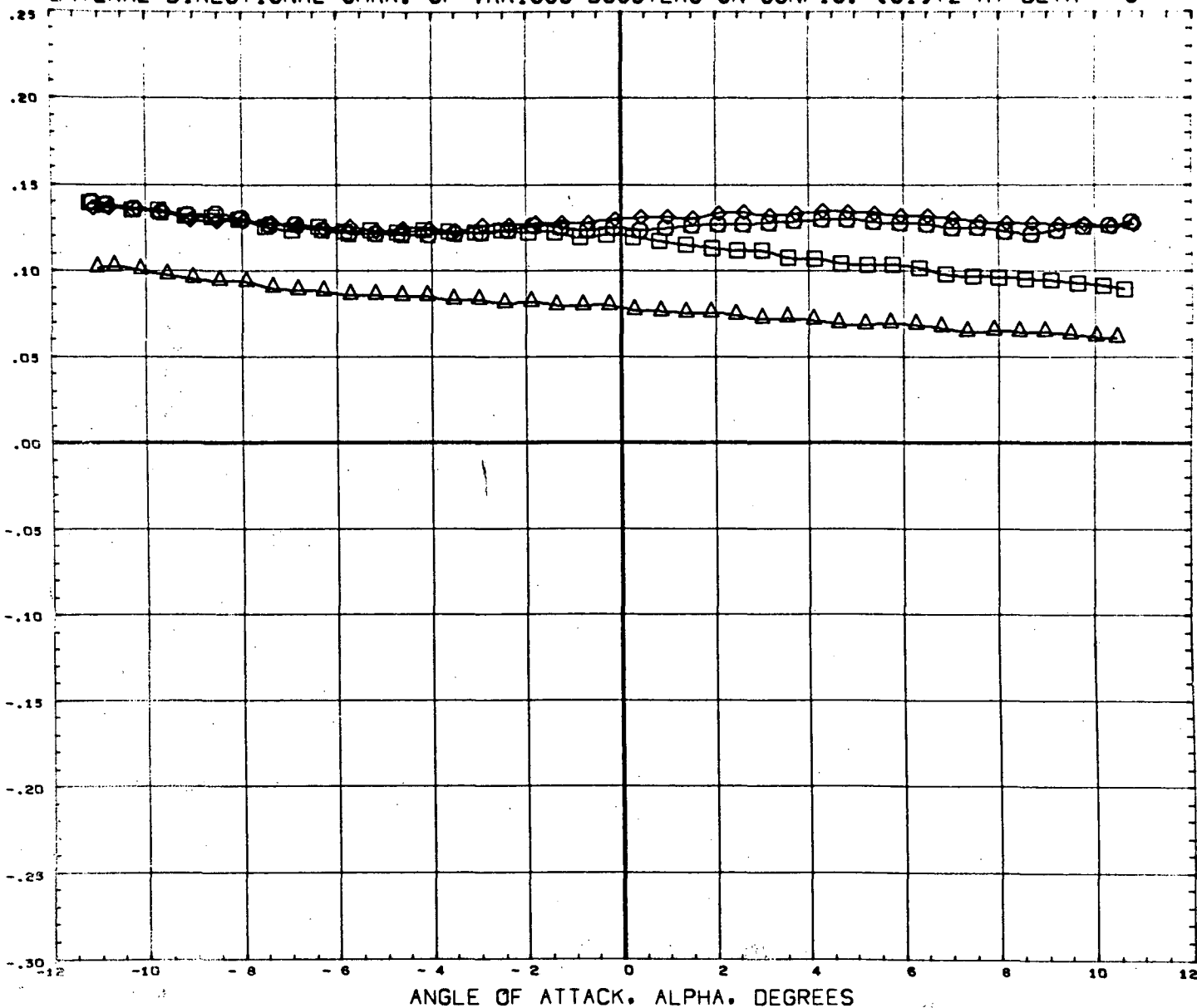
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
(RD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3	6.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4	6.000	0.000	0.000	0.000	YMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 1.51

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# LATERAL-DIRECTIONAL CHAR. OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1
(RD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2
(RD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3
(RD7458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
6.000	0.000	0.000	0.000	SREF	3155.3040	SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004	IN.
6.000	0.000	0.000	0.000	BREF	882.0004	IN.
6.000	0.000	0.000	0.000	XMRF	557.0004	IN.
				YMRF	0.0000	IN.
				ZMRF	200.0004	IN.
				SCALE	0.0060	

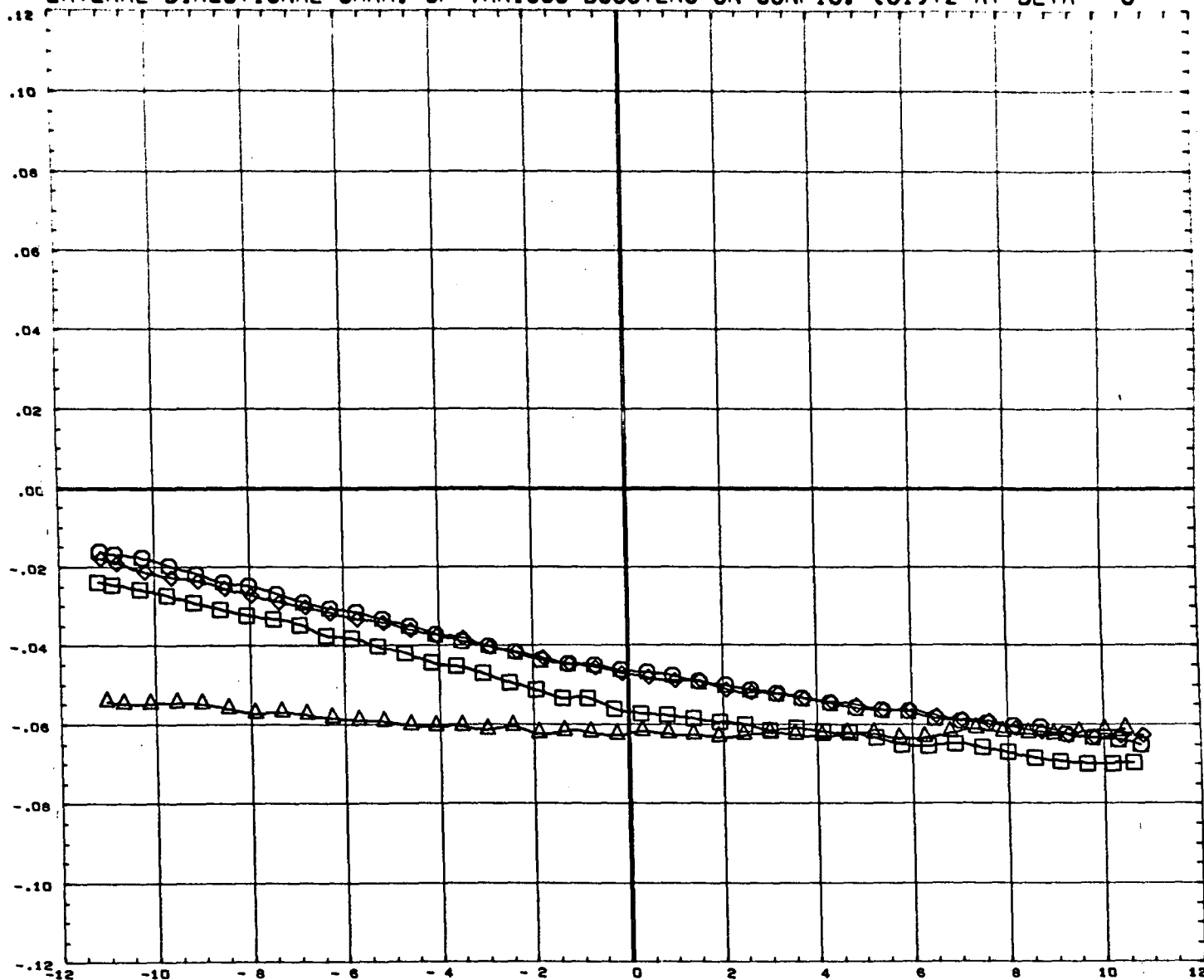
MACH

1.51

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# LATERAL-DIRECTIONAL CHAR. OF VARIOUS BOOSTERS ON CONFIG. (01)T2 AT BETA = 6

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



ANGLE OF ATTACK, ALPHA, DEGREES

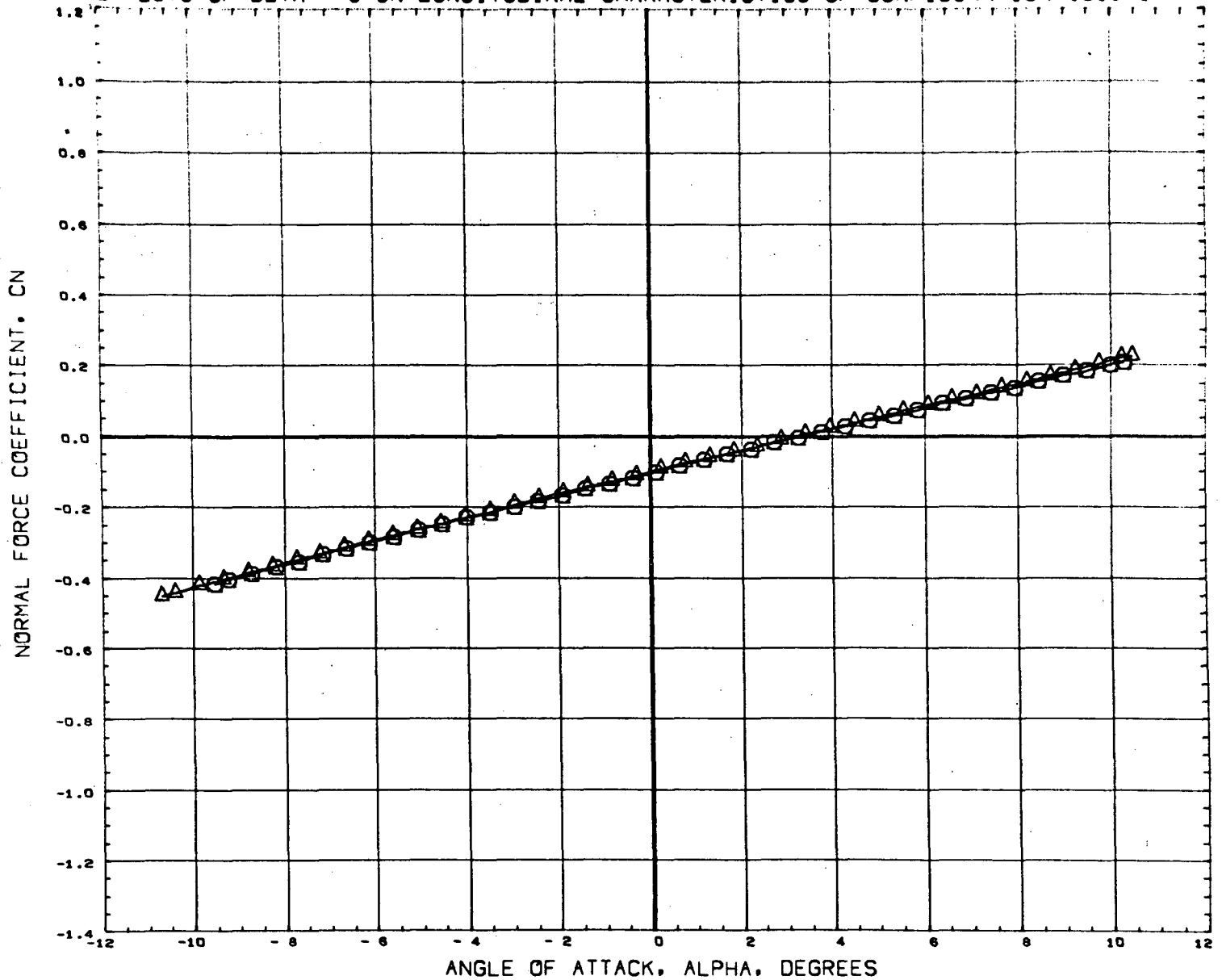
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7452)	MDAC S-222 COMPOSITE (T-CG) (01) T2B1	6.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7454)	MDAC S-222 COMPOSITE (T-CG) (01) T2B2	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
(RD7455)	MDAC S-222 COMPOSITE (T-CG) (01) T2B3	6.000	0.000	0.000	0.000	BREF	882.0004 IN.
(RD7458)	MDAC S-222 COMPOSITE (T-CG) (01) T2B4	6.000	0.000	0.000	0.000	XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

1.51

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



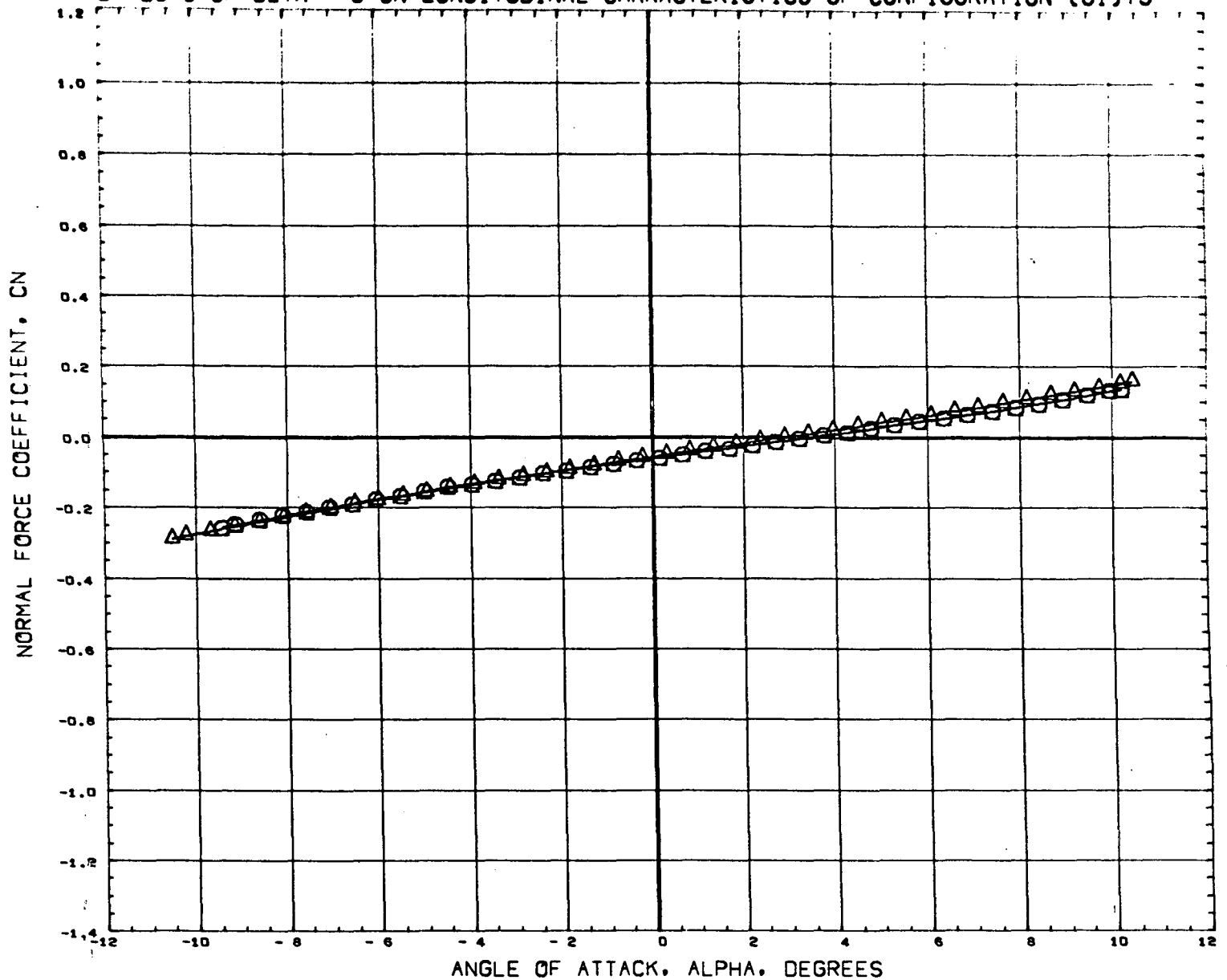
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7483)	MDAC S-222 COMPOSITE (T-CG) (01)T3
(CD7485)	MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD74B3) MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (CD74B5) MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA ELEVTR AILRON RUDDER  
 0.000 0.000 0.000 0.000  
 6.000 0.000 0.000 0.000

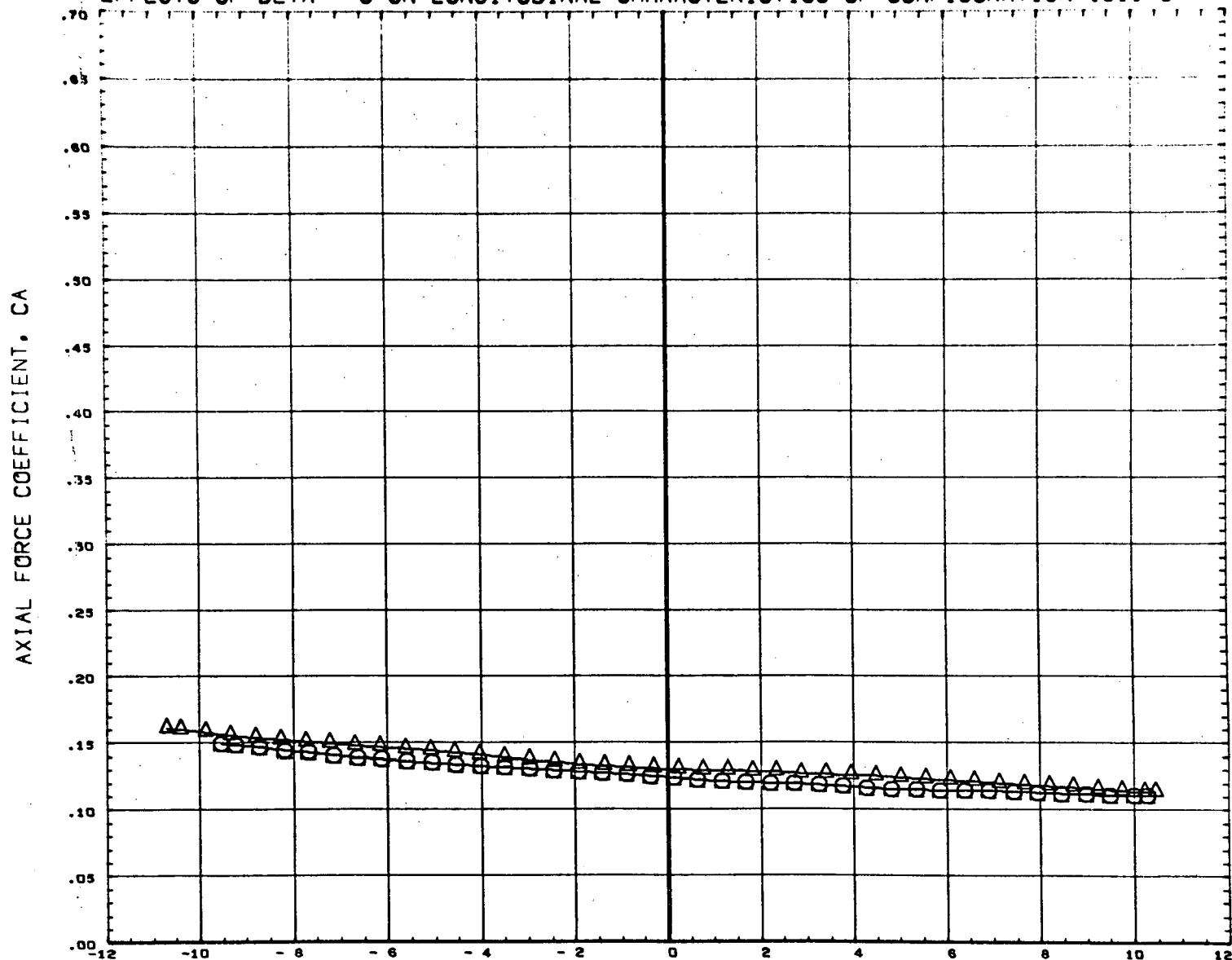
REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0063

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7493) MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (CD7495) MDAC S-222 COMPOSITE (T-CG) (01)T3

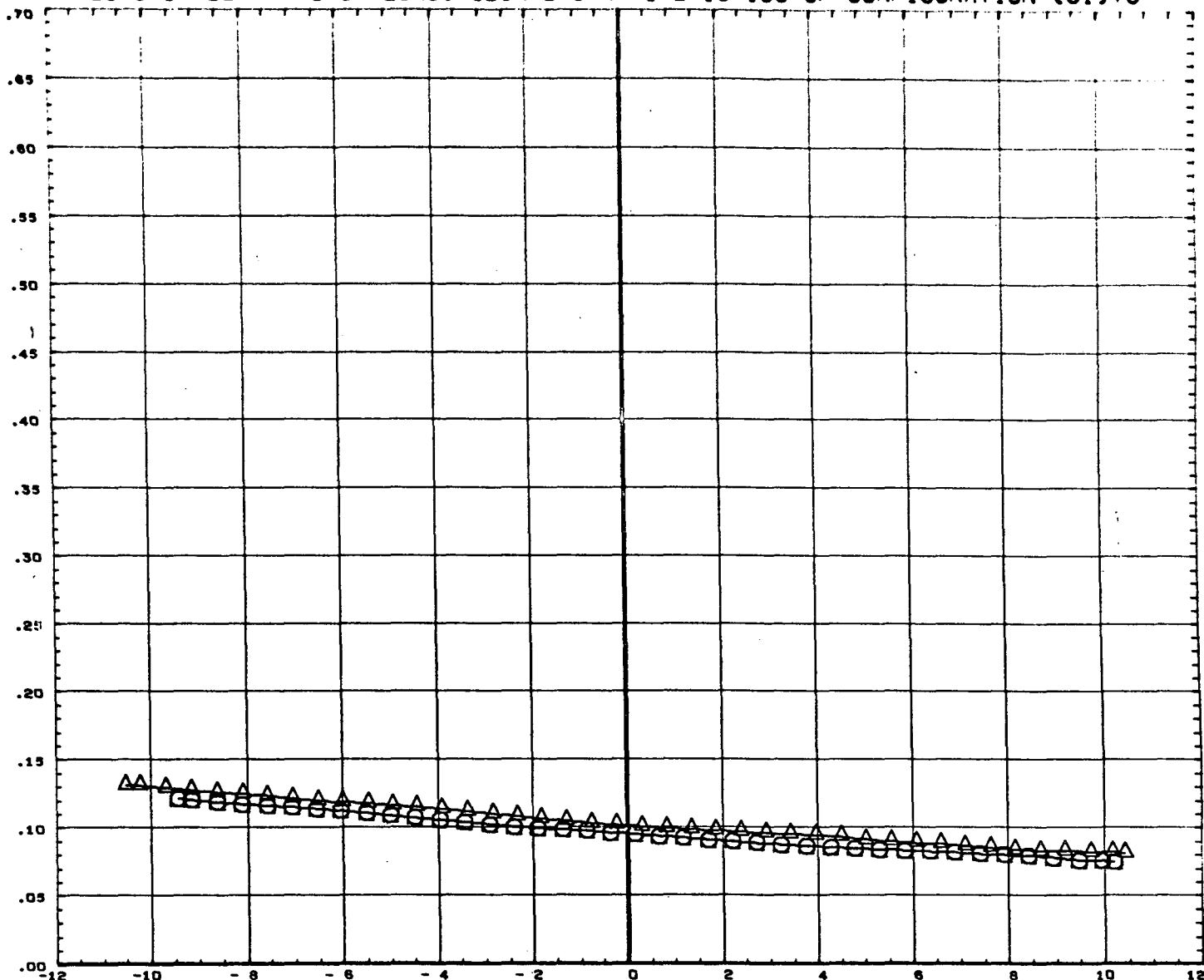
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3

AXIAL FORCE COEFFICIENT, CA



ANGLE OF ATTACK, ALPHA, DEGREES

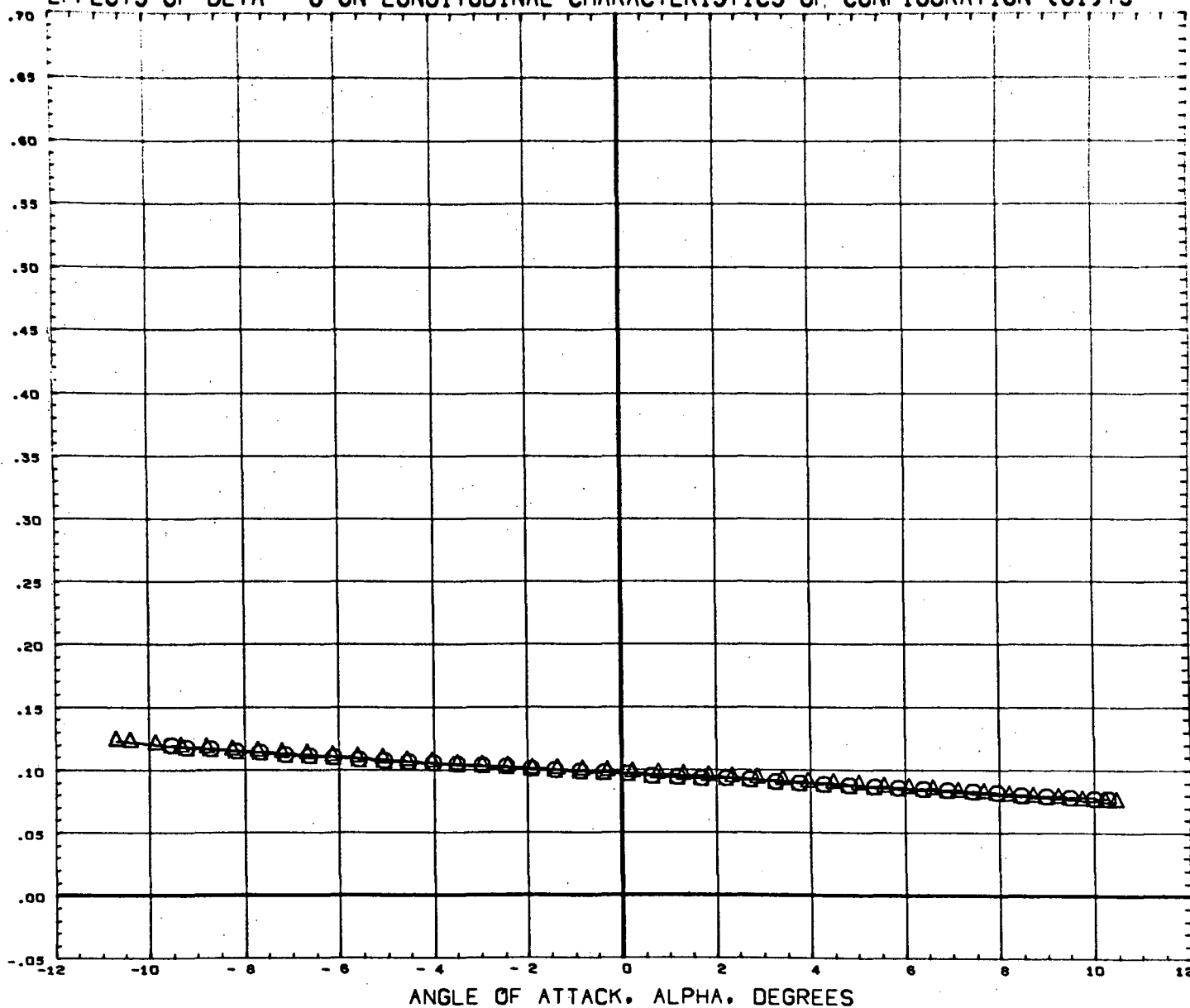
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD74B3)	MDAC S-222 COMPOSITE(T-CG) (01)T3	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD74B5)	MDAC S-222 COMPOSITE(T-CG) (01)T3	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	537.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3

FOREBODY AXIAL FORCE COEFFICIENT, CAF



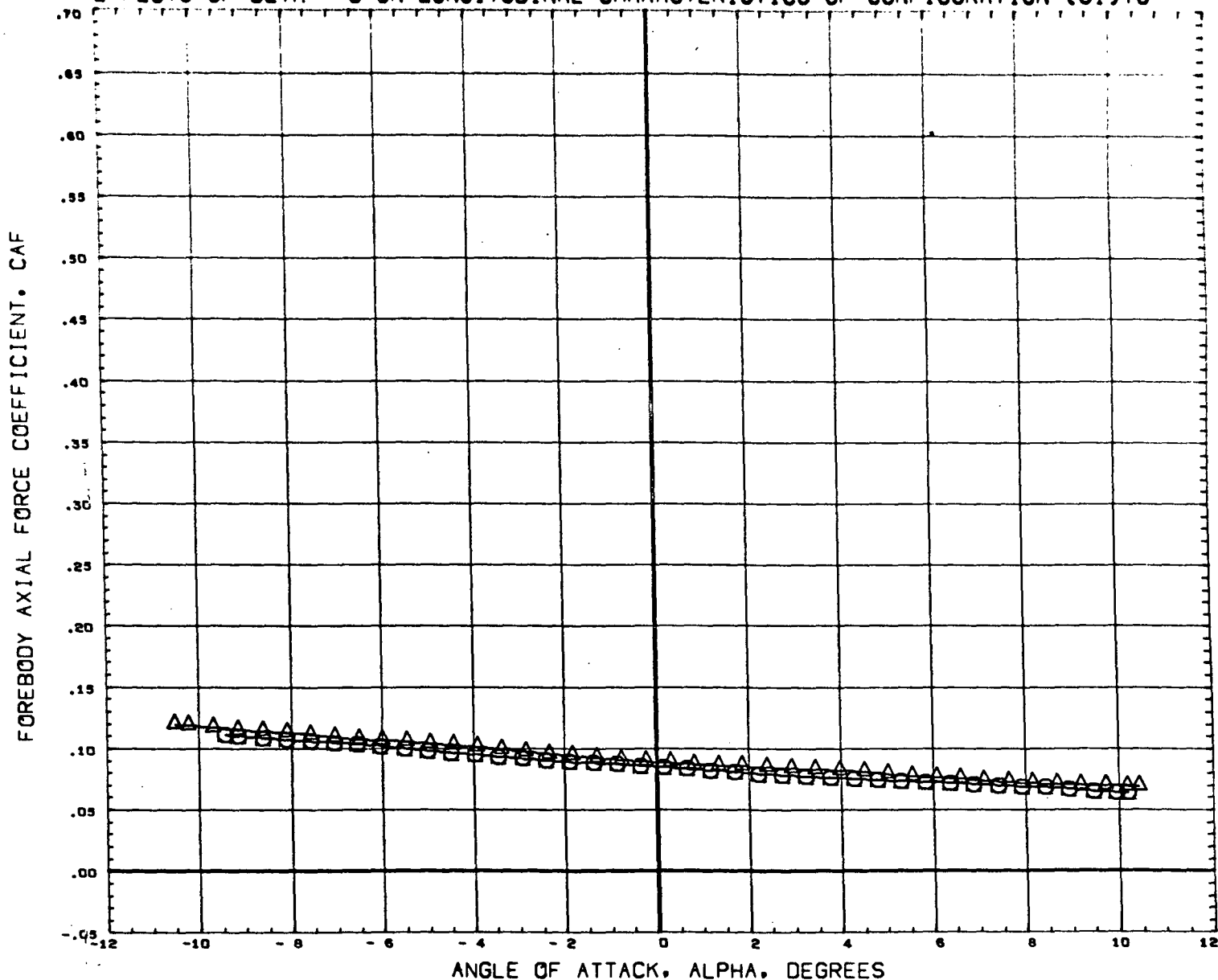
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7483) MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (CD7485) MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



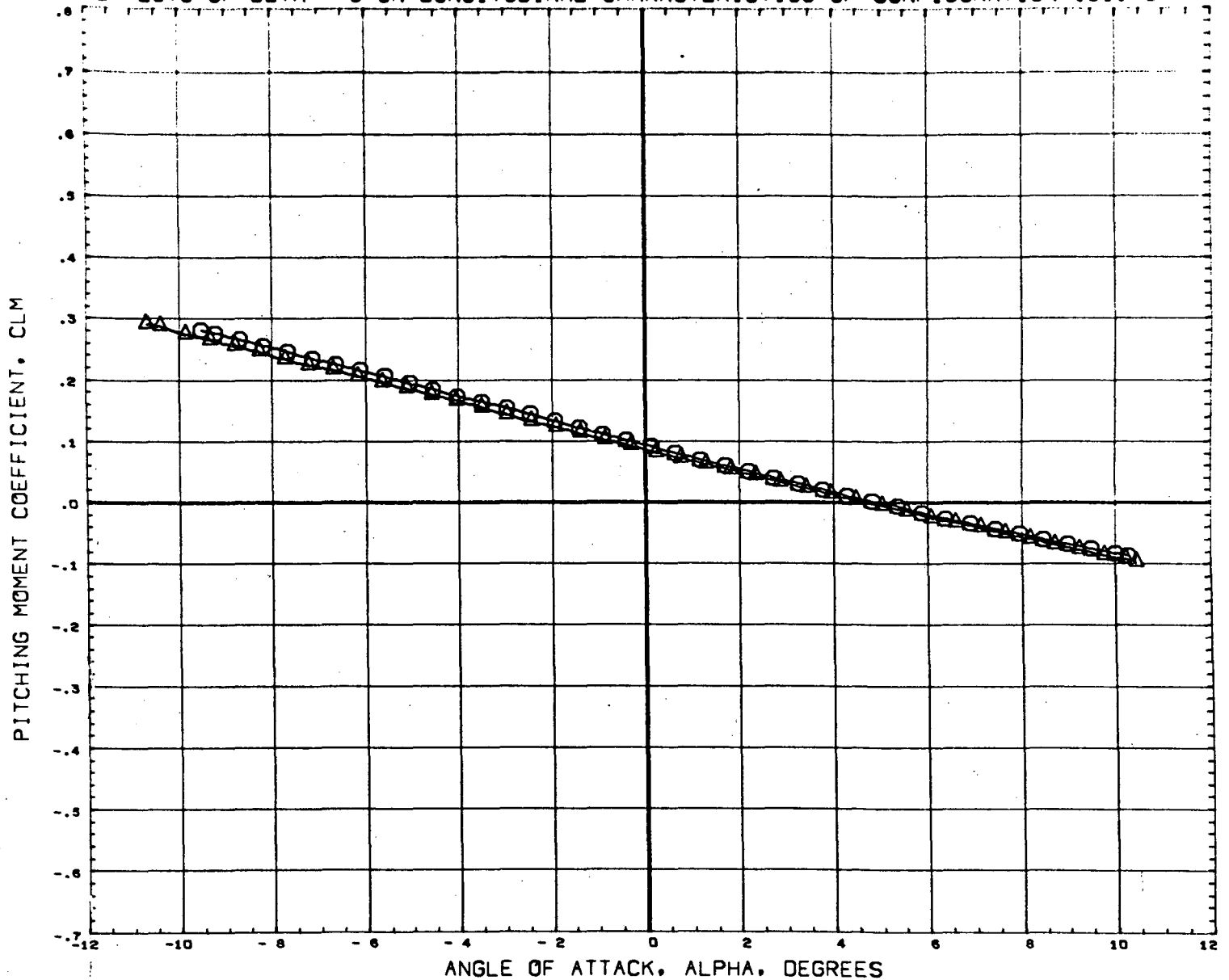
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD74B3)	MDAC S-222 COMPOSITE (T-CG) (01)T3
(CD74B5)	MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION
0.000	0.000	0.000	0.000	SREF 3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF 609.5004 IN.
				BREF 882.0004 IN.
				XMRP 557.0004 IN.
				YMRP 0.0000 IN.
				ZMRP 200.0004 IN.
				SCALE 0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



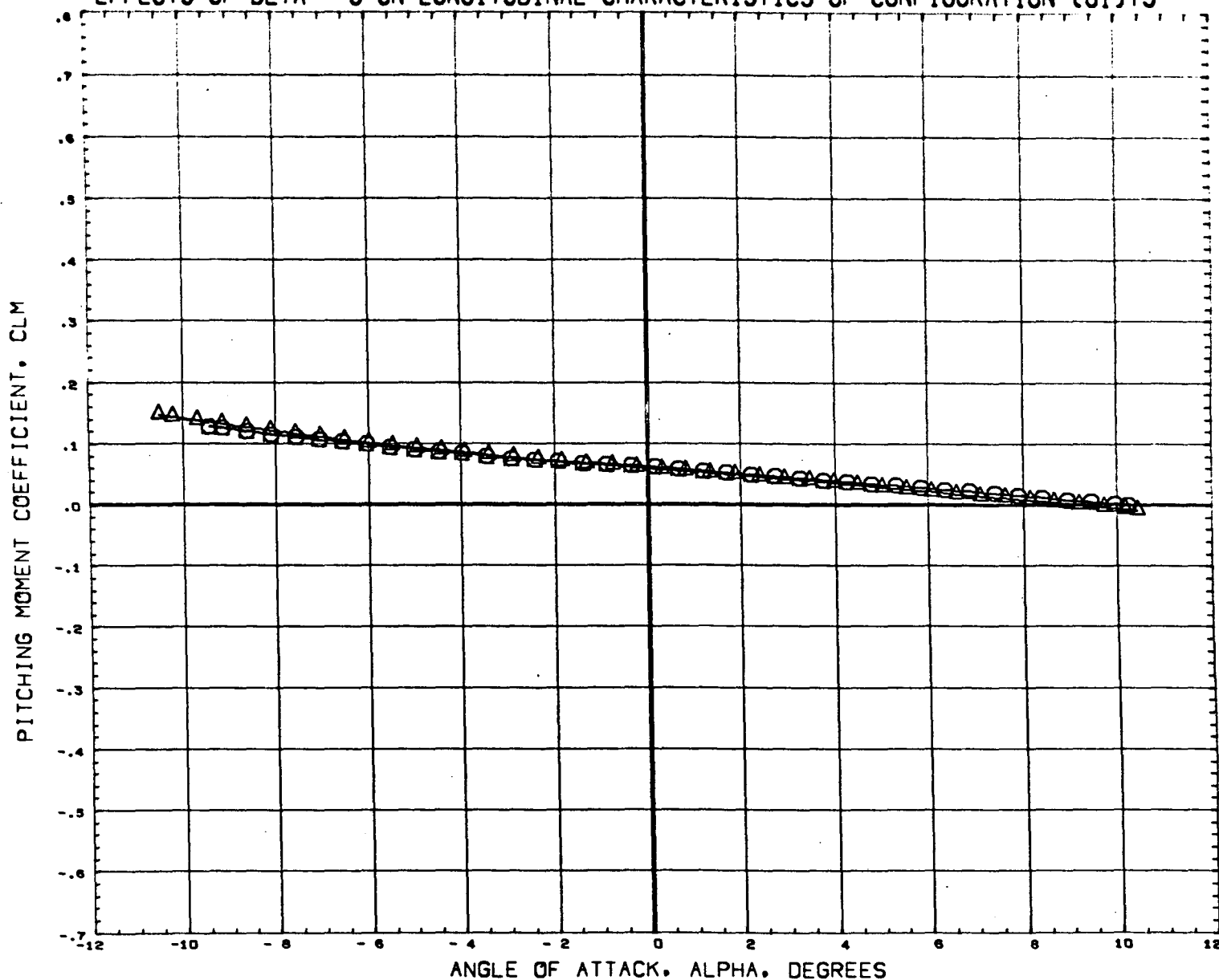
DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
 (CD74B3)       MDAC S-222 COMPOSITE (T-CG) (01) T3  
 (CD74B5)       MDAC S-222 COMPOSITE (T-CG) (01) T3

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH        2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7483)	MOAC S-222 COMPOSITE (T-CG) (01)T3
(CD7485)	MOAC S-222 COMPOSITE (T-CG) (01)T3

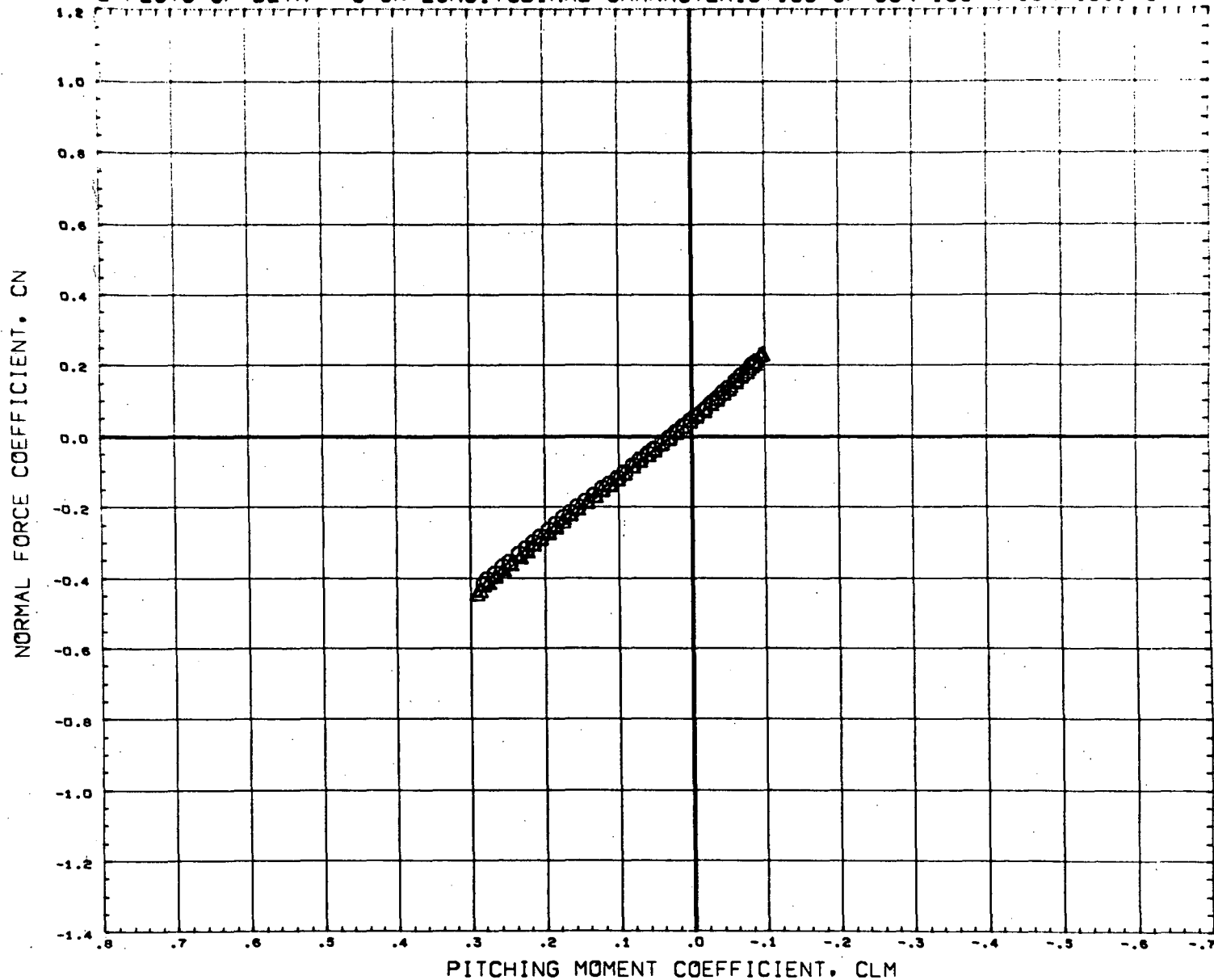
BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



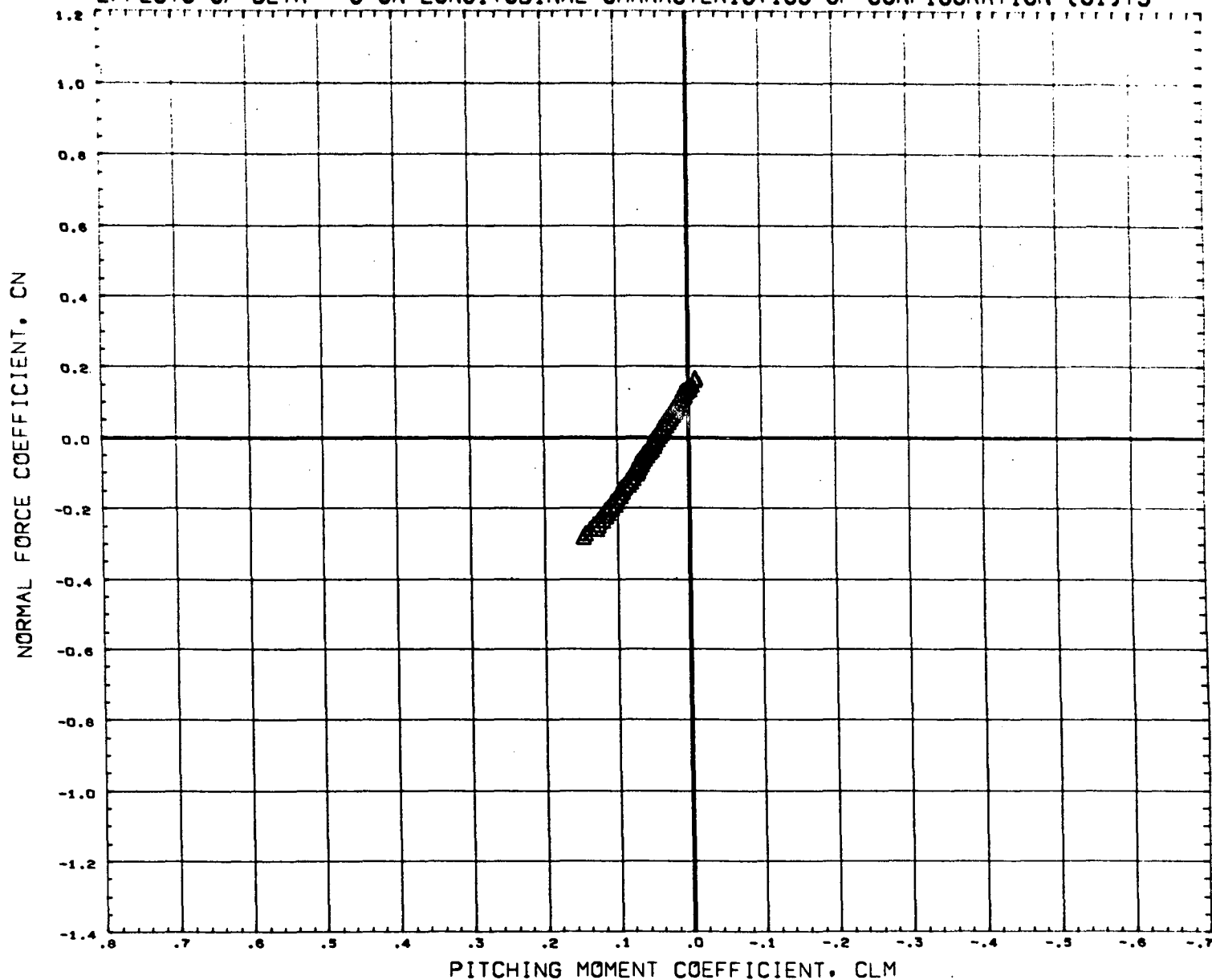
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD74B3) Q MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (CD74B5) A MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



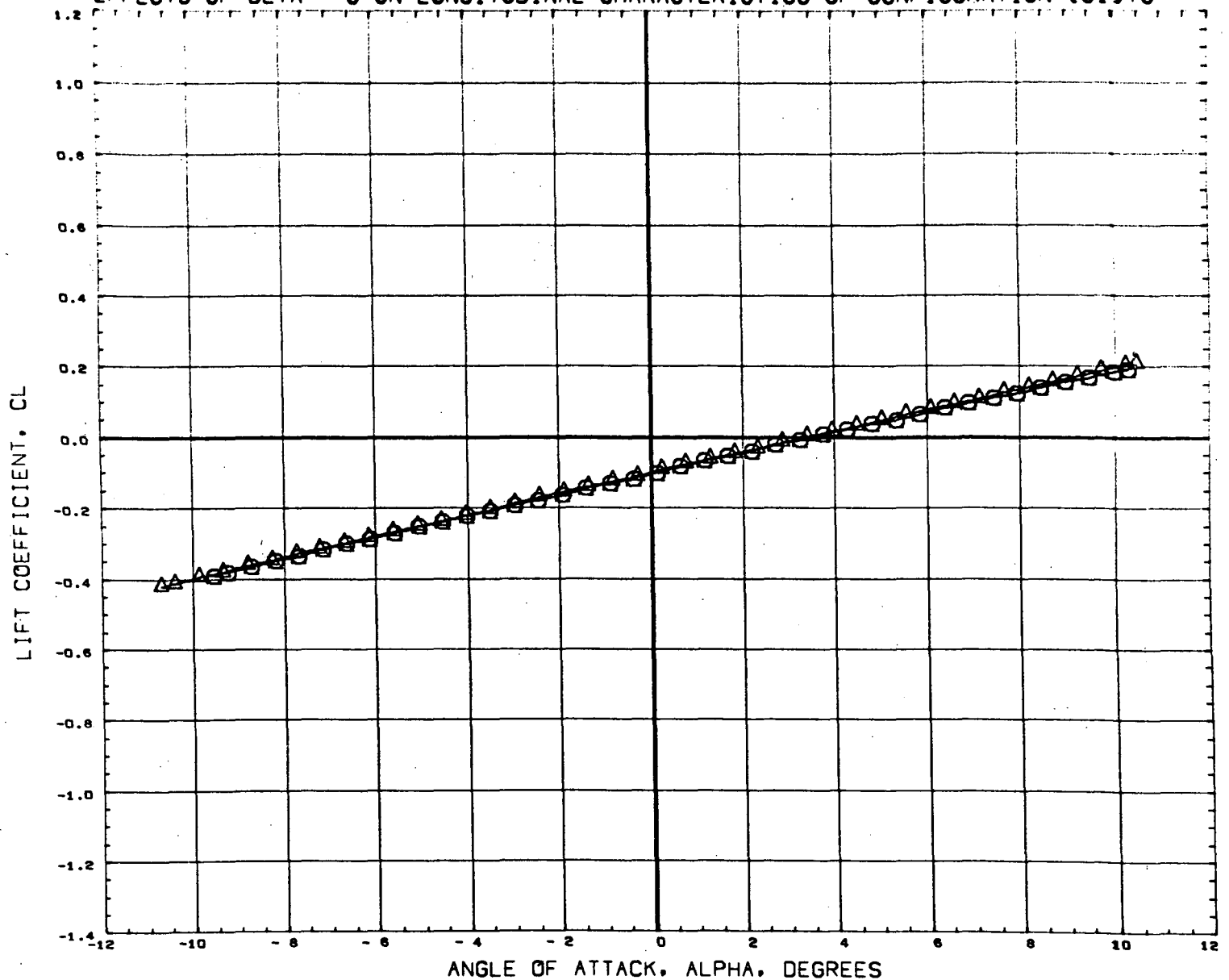
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	ATLRON	RUDDER	REFERENCE INFORMATION	
(CD74B3)	MDAC S-222 COMPOSITE (T-CG) (01) T3	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD74B5)	MDAC S-222 COMPOSITE (T-CG) (01) T3	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



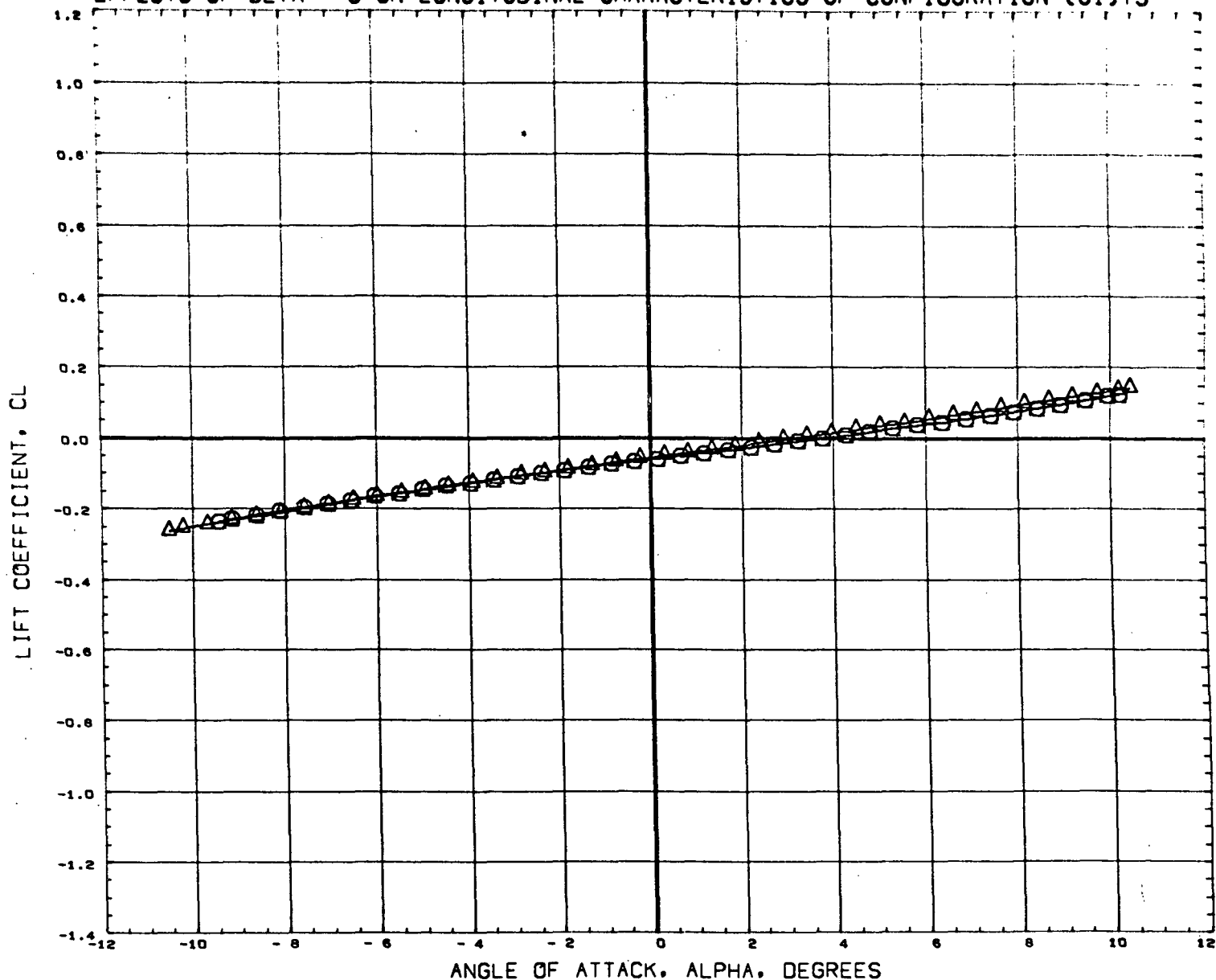
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7483) MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (CD7485) MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMPP	557.0004 IN.
				YMPP	0.0000 IN.
				ZMPP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3

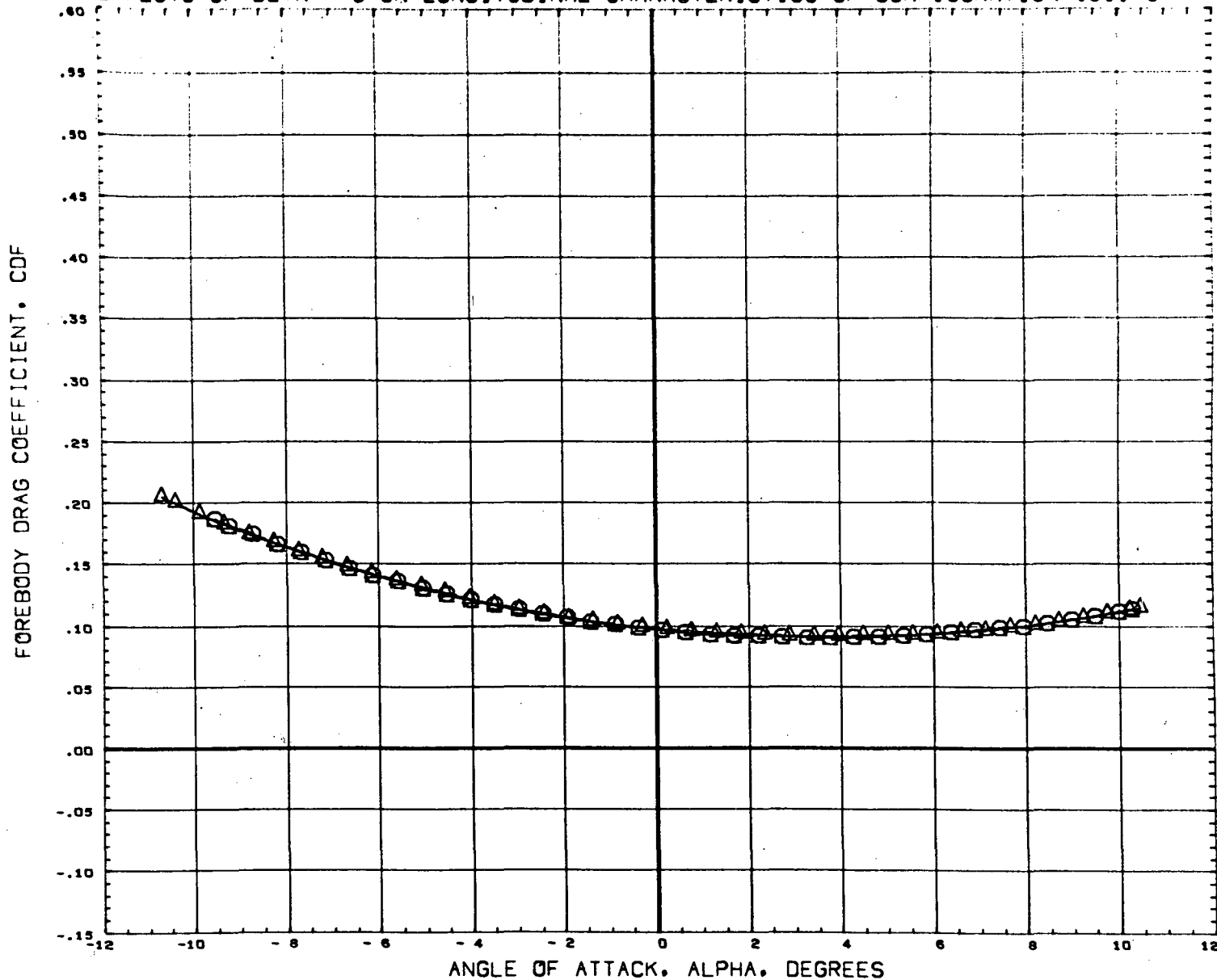


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD7483)	MDAC S-222 COMPOSITE (T-CG) (01)T3	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD7483)	MDAC S-222 COMPOSITE (T-CG) (01)T3	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD7483) MDAC S-222 COMPOSITE (T-CG) (01) T3  
 (CD7485) MDAC S-222 COMPOSITE (T-CG) (01) T3

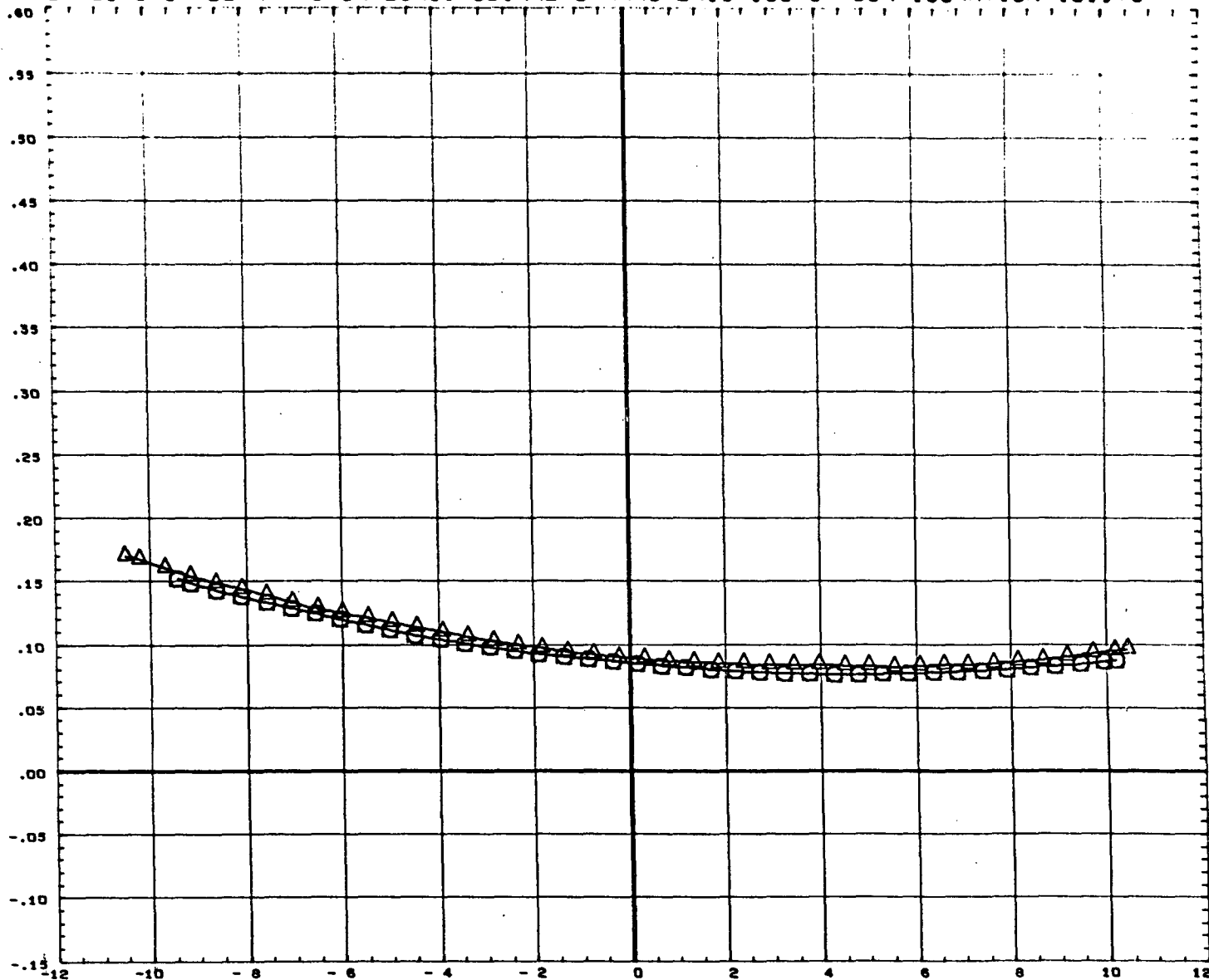
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ. FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3

FOREBODY DRAG COEFFICIENT, CDF



ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD74B3)  MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (CD74B5)  MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000

REFERENCE INFORMATION	
SREF	3155.3040 SQ.FT.
LREF	609.5004 IN.
BREF	882.0004 IN.
XMRP	557.0004 IN.
YMRP	0.0000 IN.
ZMRP	200.0004 IN.
SCALE	0.0060

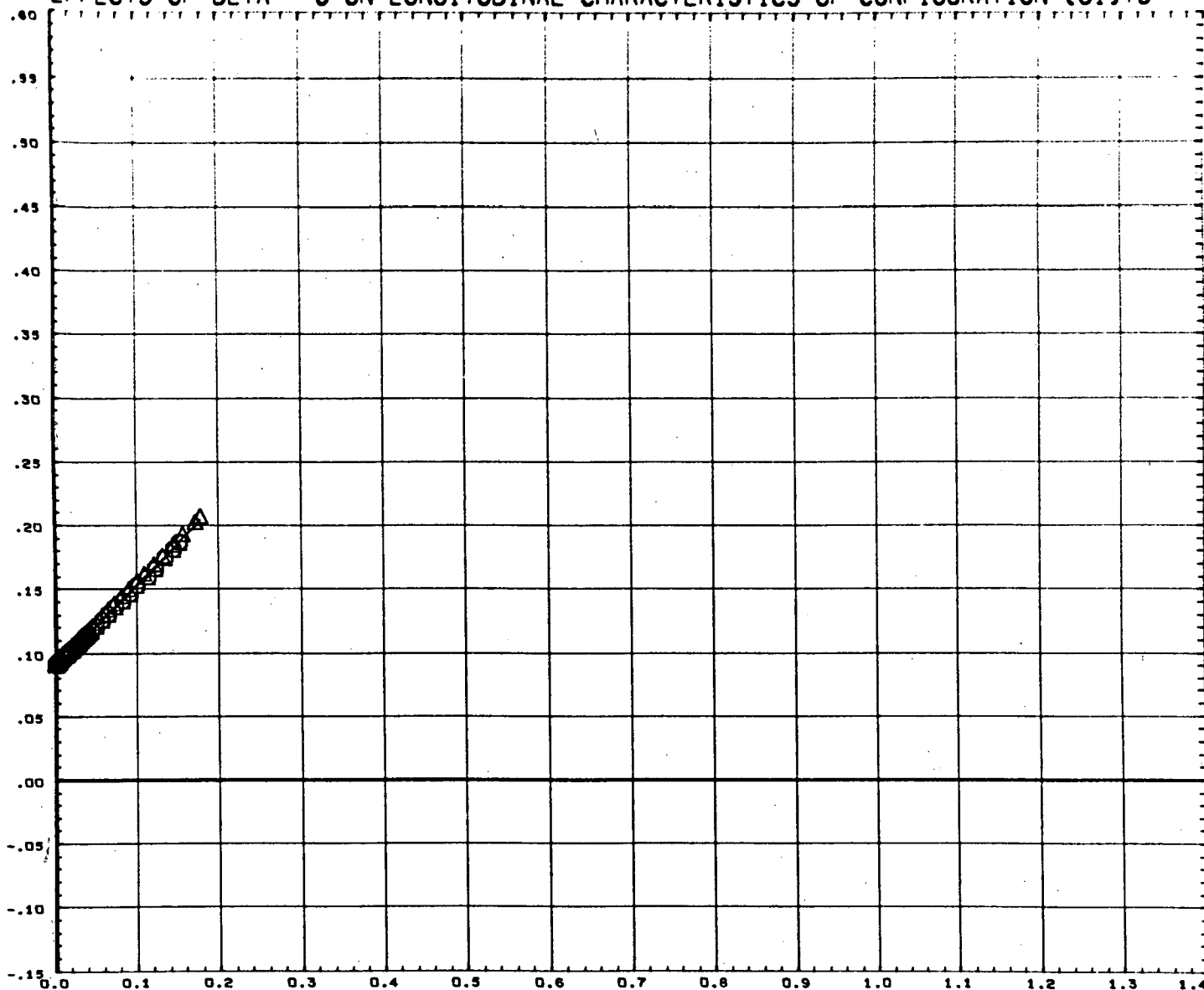
MACH

4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQ

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD7483)	MDAC S-222 COMPOSITE (T-CG) (01) T3
(CD7485)	MDAC S-222 COMPOSITE (T-CG) (01) T3

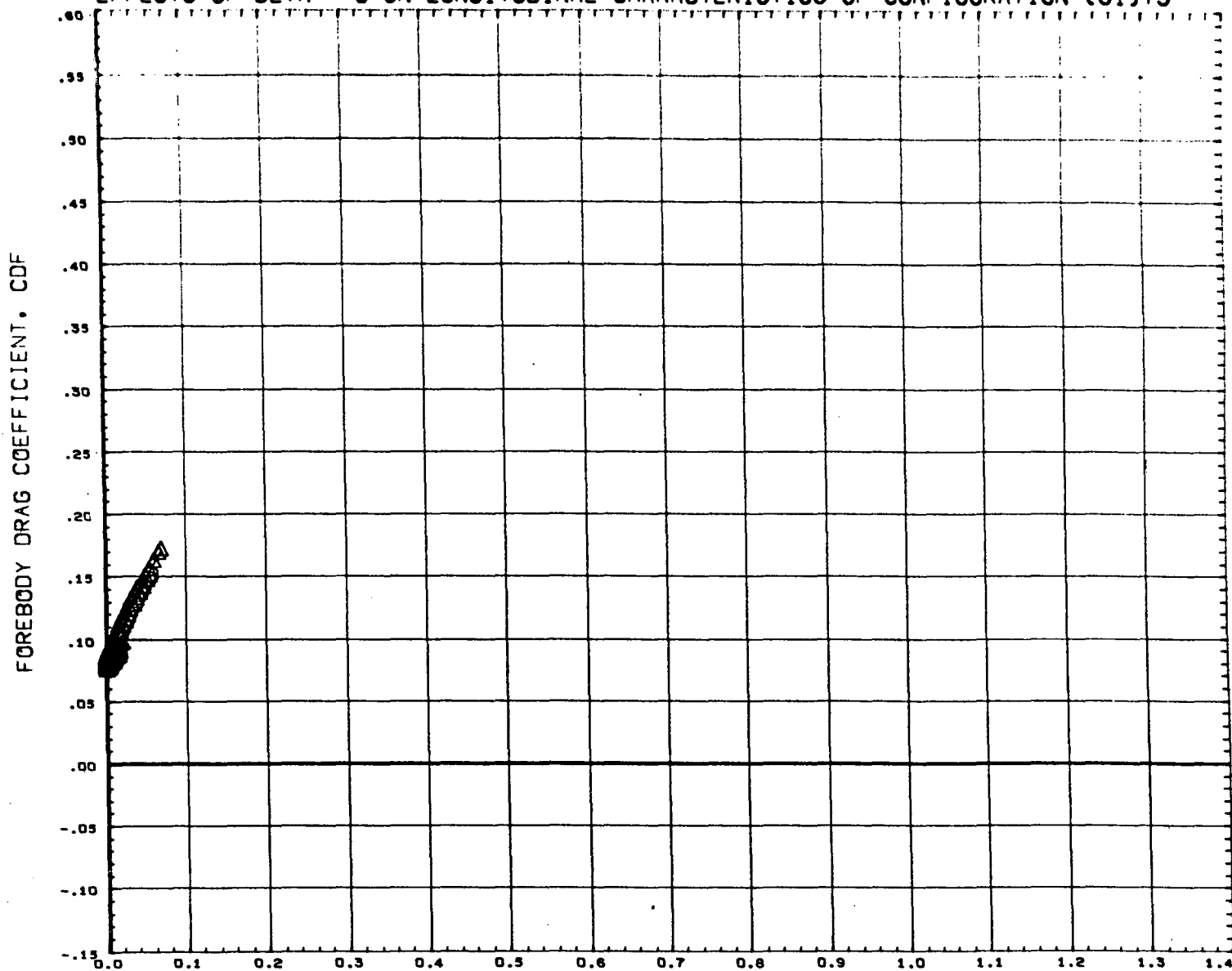
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH

2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



LIFT COEFFICIENT SQUARED, CLSQR

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7483) MDAC S-222 COMPOSITE(T-CG) (01)T3  
(CD7485) MDAC S-222 COMPOSITE(T-CG) (01)T3

BETA ELEVTR AILRON RUDDER  
0.000 0.000 0.000 0.000  
6.000 0.000 0.000 0.000

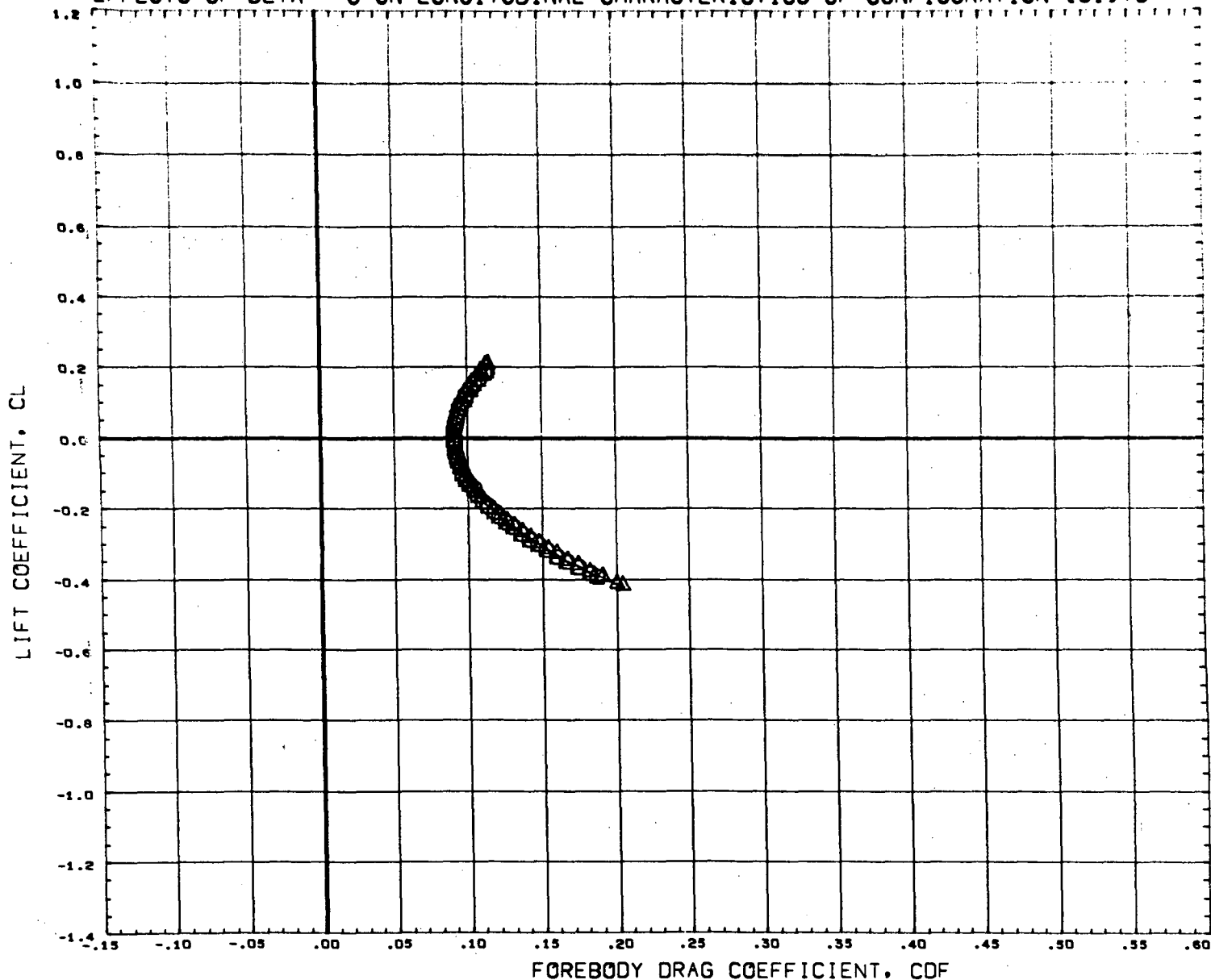
REFERENCE INFORMATION  
SREF 3155.3040 SQ.FT.  
LREF 609.5004 IN.  
BREF 882.0004 IN.  
XMRP 557.0004 IN.  
YMRP 0.0000 IN.  
ZMRP 200.0004 IN.  
SCALE 0.0060

MACH

4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



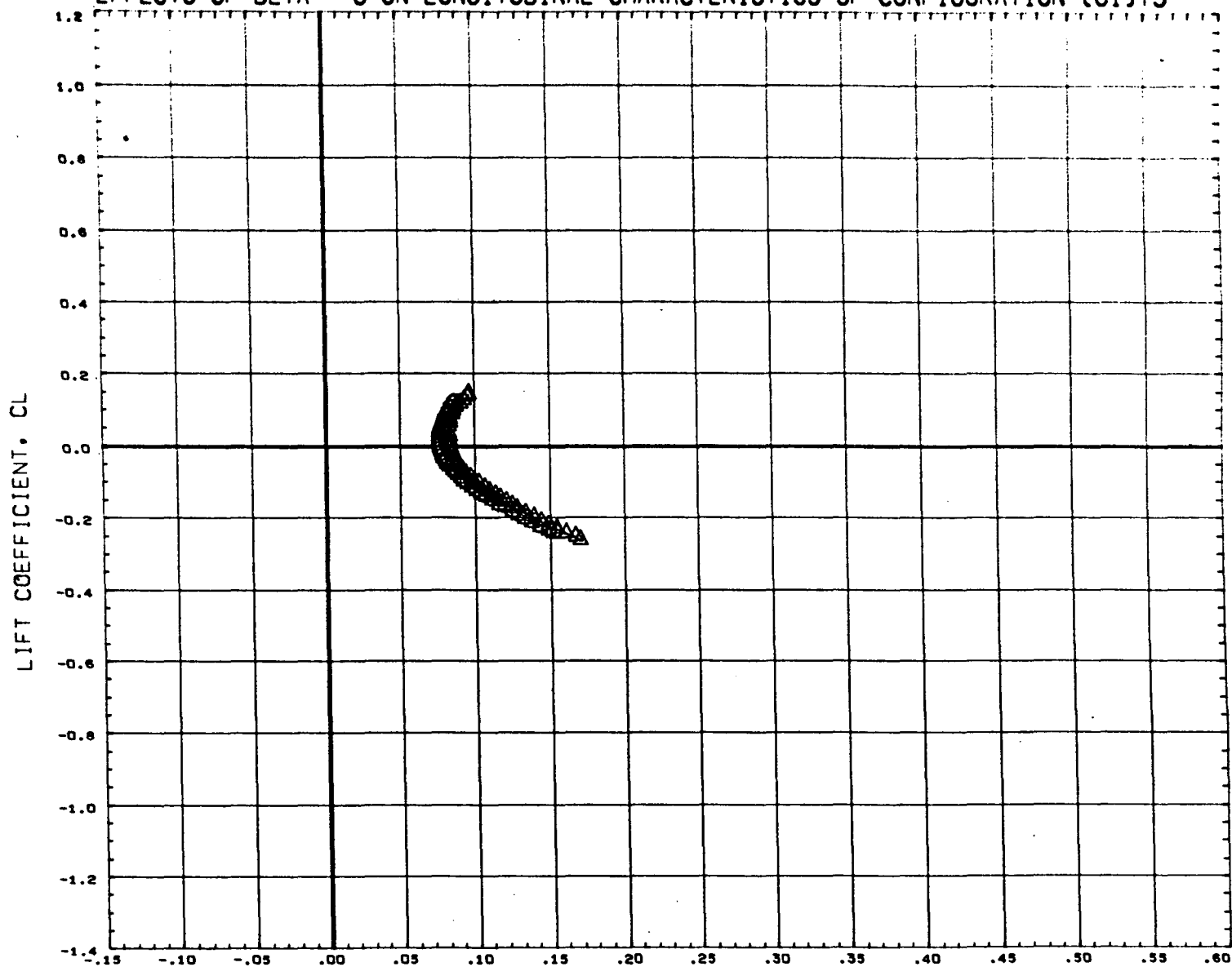
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD74B3) MDAC S-222 COMPOSITE(T-CG) (01)T3  
 (CD74B5) MDAC S-222 COMPOSITE(T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



FOREBODY DRAG COEFFICIENT, CDF

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD7483) Q MDAC S-222 COMPOSITE (T-CG) (01)T3  
(CD7485) A MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER
0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000

REFERENCE INFORMATION

REFERENCE INFORMATION	VALUE	UNIT
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

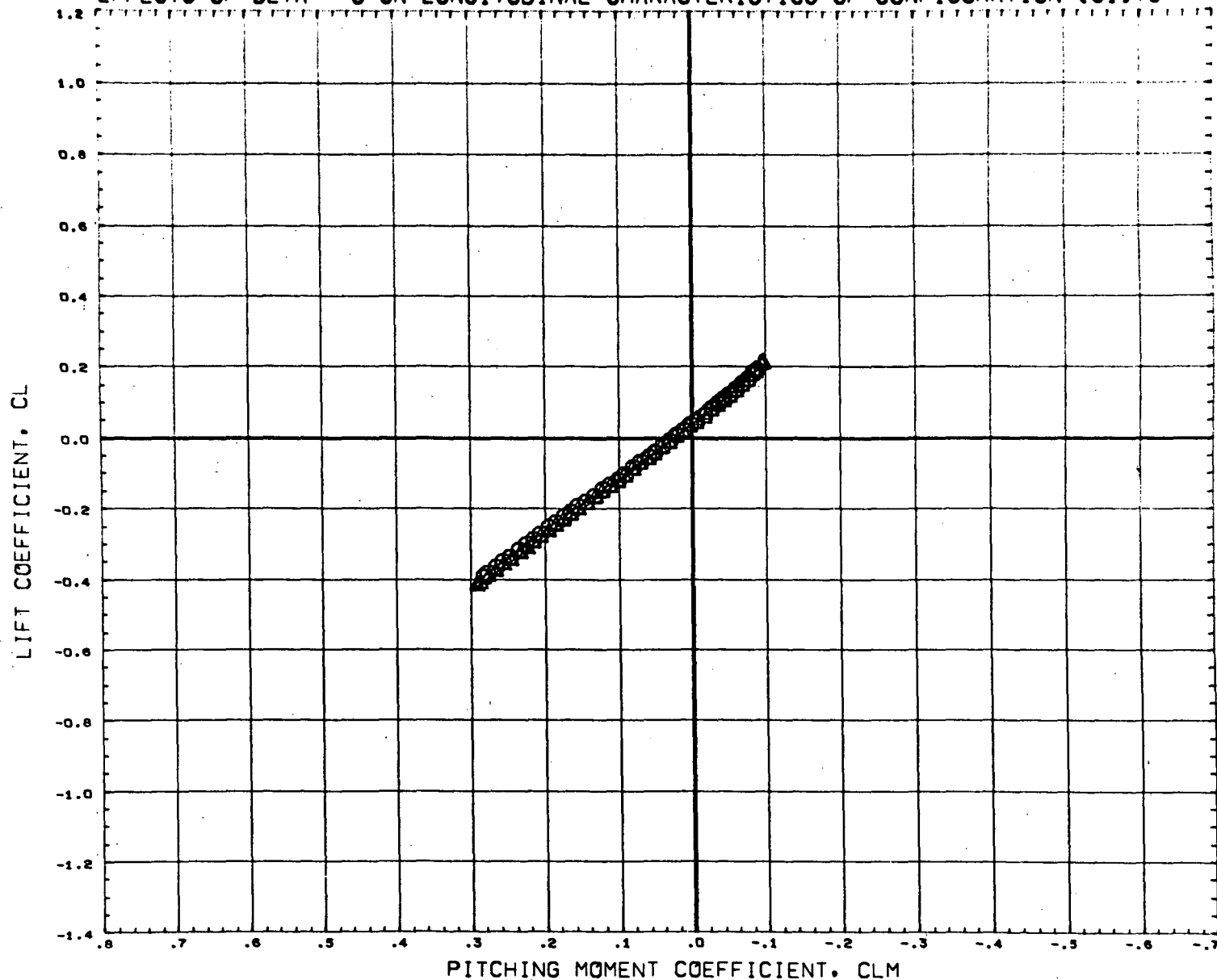
MACH

4.47

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (C074B3) Q MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (C074B5) A MDAC S-222 COMPOSITE (T-CG) (01)T3

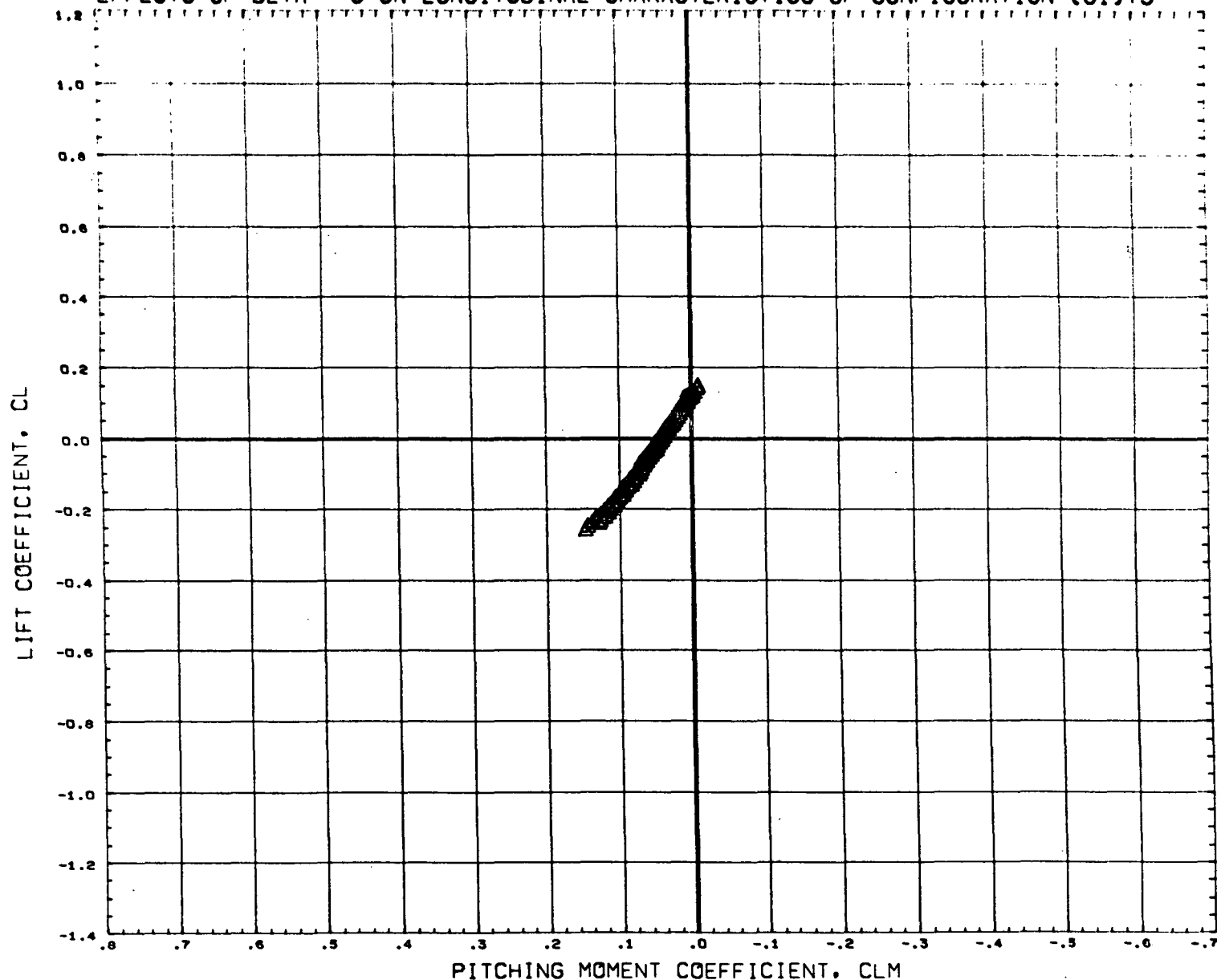
BETA ELEVTR AILRON RUDDER  
 0.000 0.000 0.000 0.000  
 6.000 0.000 0.000 0.000

REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LONGITUDINAL CHARACTERISTICS OF CONFIGURATION (01)T3

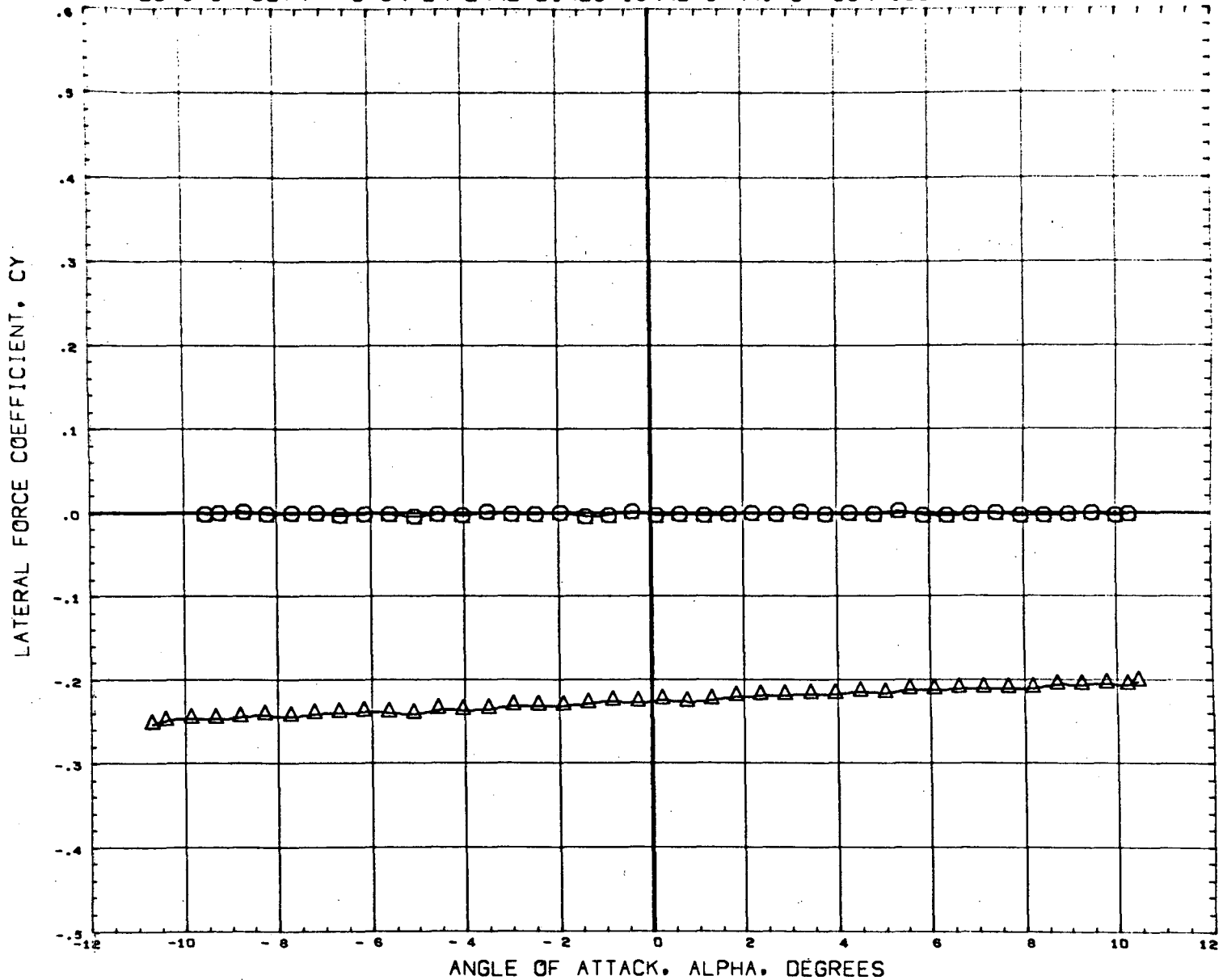


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(CD74B3)	MDAC S-222 COMPOSITE (T-CG) (01)T3	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD74B5)	MDAC S-222 COMPOSITE (T-CG) (01)T3	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T3



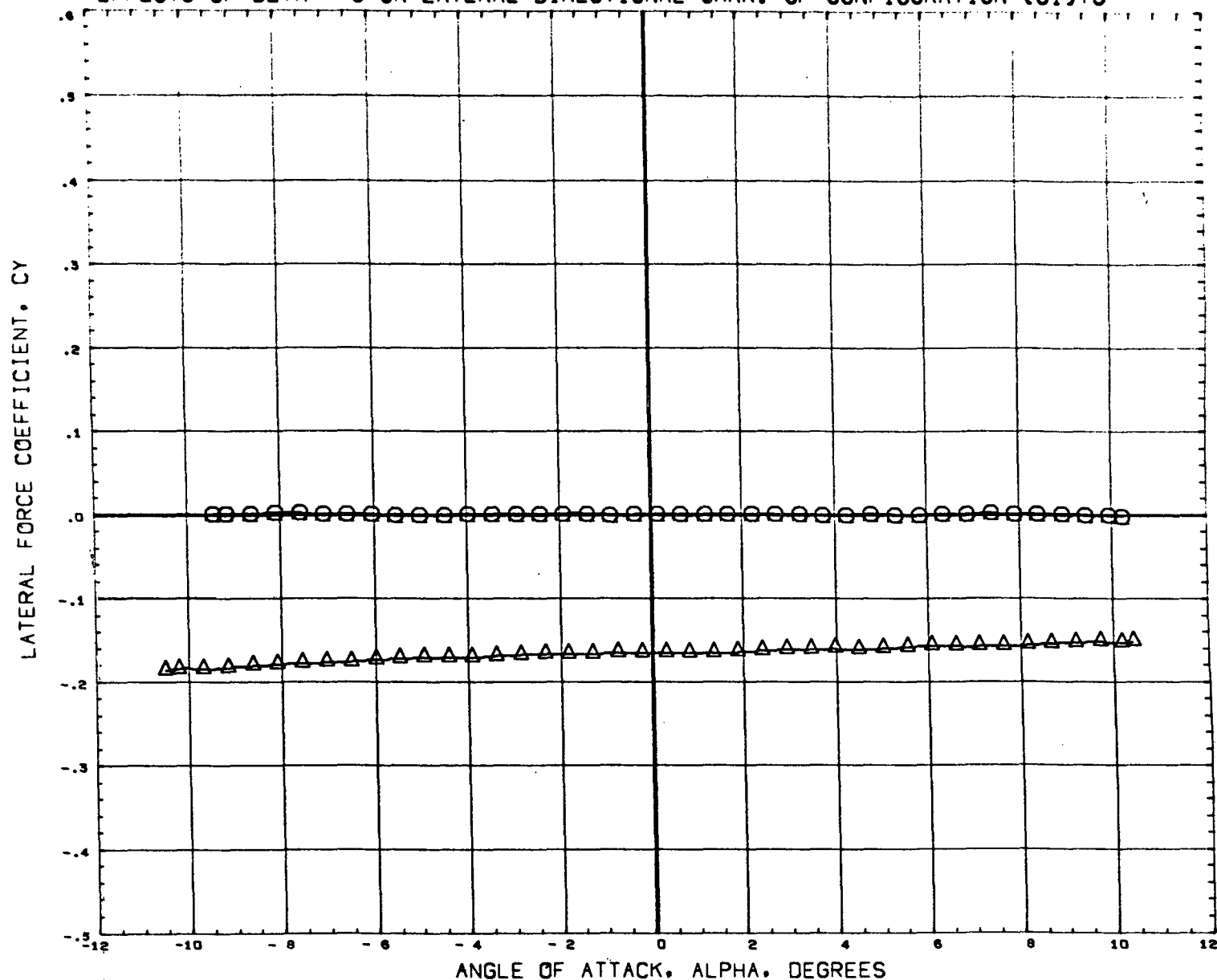
DATA SET SYMBOL CONFIGURATION DESCRIPTION  
(RD74B3)  $\odot$  MDAC S-222 COMPOSITE (T-CG) (01)T3  
(RD74B5)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T3



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7483) ○ MDAC S-222 COMPOSITE(T-CG) (01)T3  
(RD7485) △ MDAC S-222 COMPOSITE(T-CG) (01)T3

BETA ELEVTR AILRON RUDDER  
0.000 0.000 0.000 0.000  
6.000 0.000 0.000 0.000

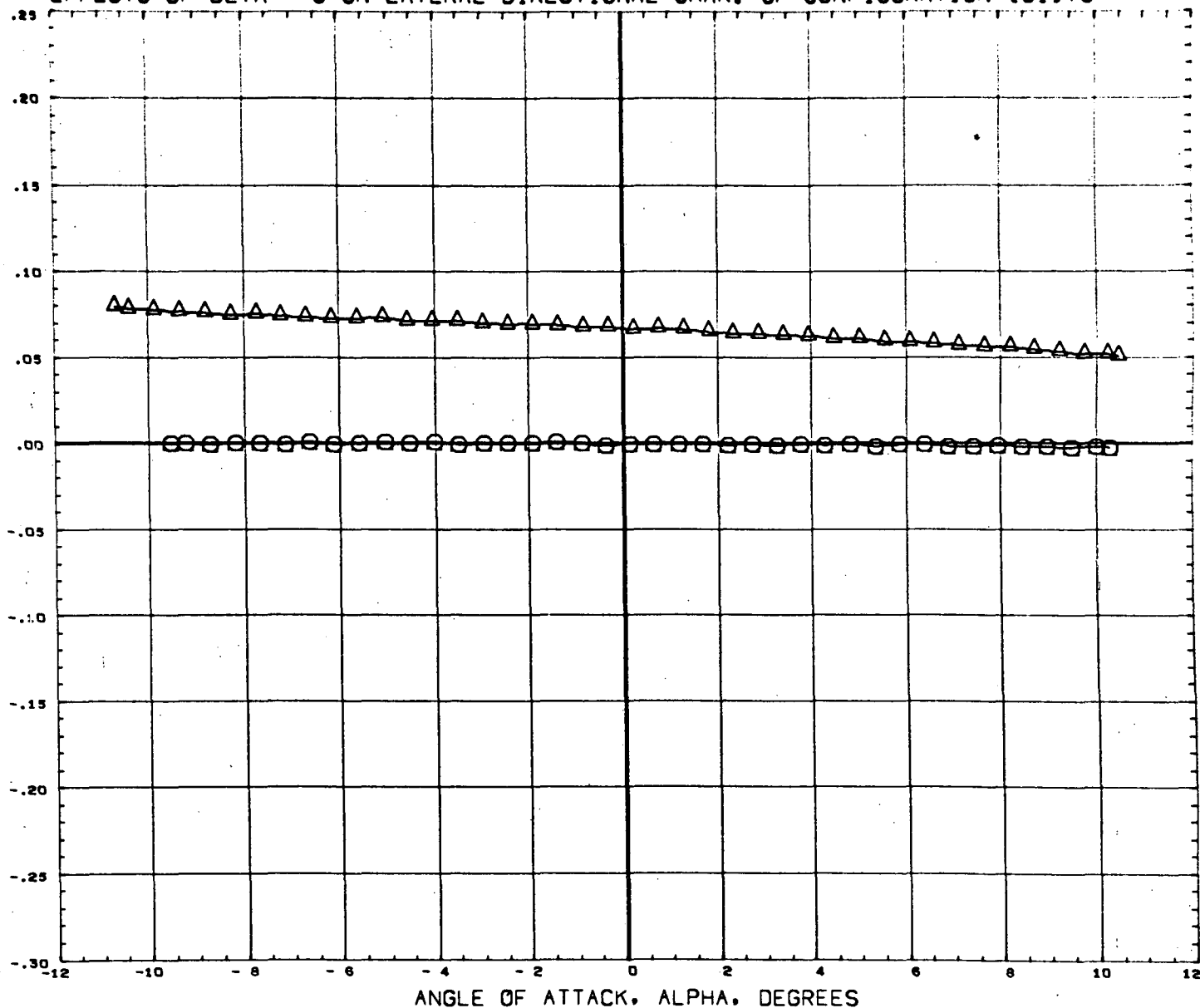
REFERENCE INFORMATION  
SREF 3155.3040 SQ.FT.  
LREF 609.5004 IN.  
BREF 882.0004 IN.  
XMRP 557.0004 IN.  
YMRP 0.0000 IN.  
ZMRP 200.0004 IN.  
SCALE 0.0060

MACH 4.47

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T3

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD7483) MDAC S-222 COMPOSITE (T-CG) (01)T3

(RD7485) MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA ELEVTR AILRON RUDDER

0.000 0.000 0.000 0.000

6.000 0.000 0.000 0.000

REFERENCE INFORMATION

SREF 3155.3040 SQ.FT.

LREF 609.5004 IN.

BREF 882.0004 IN.

XMRP 557.0004 IN.

YMRP 0.0000 IN.

ZMRP 200.0004 IN.

SCALE 0.0060

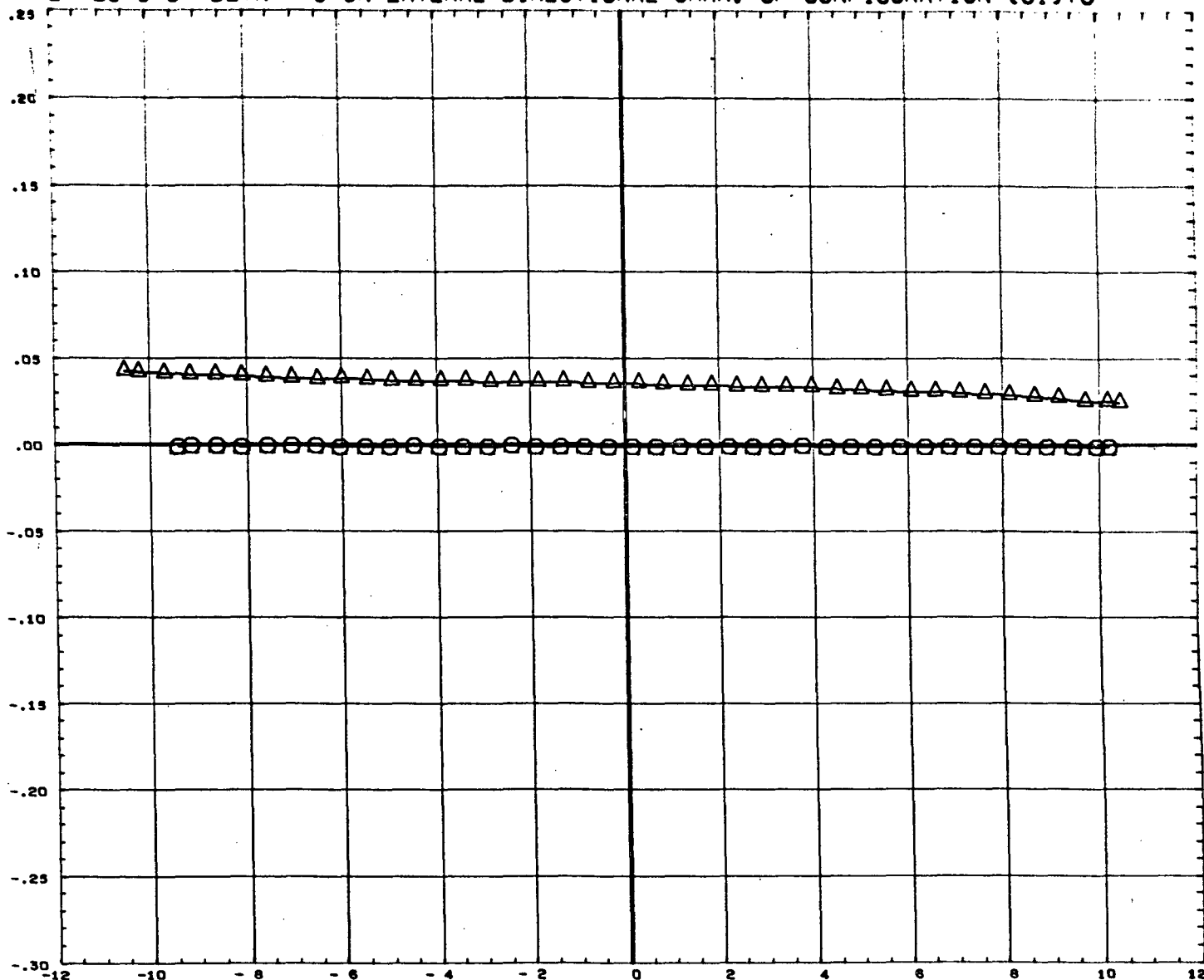
MACH

2.20

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T3

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



ANGLE OF ATTACK, ALPHA, DEGREES

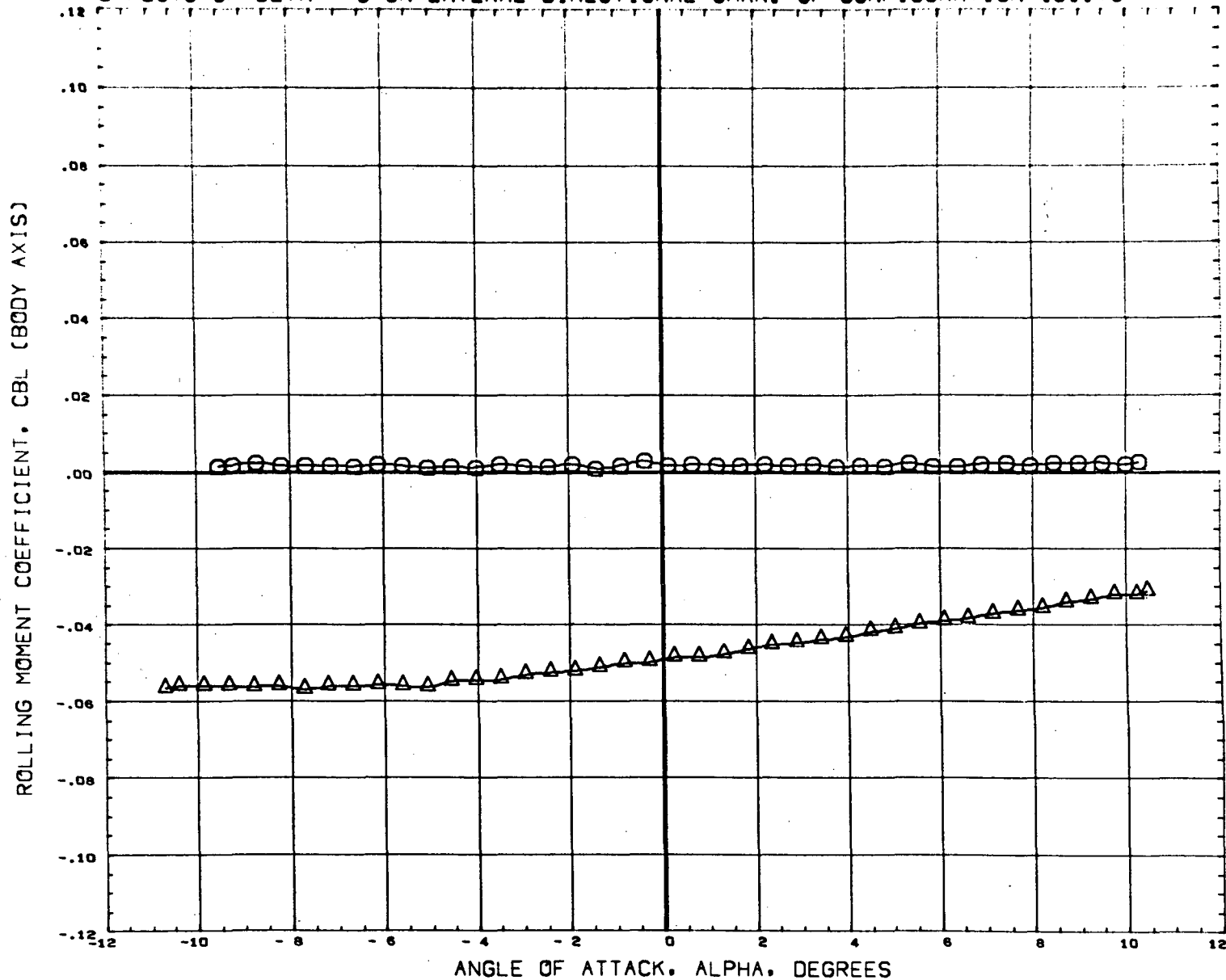
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(RD7483)	MDAC S-222 COMPOSITE (T-CG) (01)T3	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(RD7485)	MDAC S-222 COMPOSITE (T-CG) (01)T3	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060

MACH

4.47

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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T3



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (R07483) MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (R07485) MDAC S-222 COMPOSITE (T-CG) (01)T3

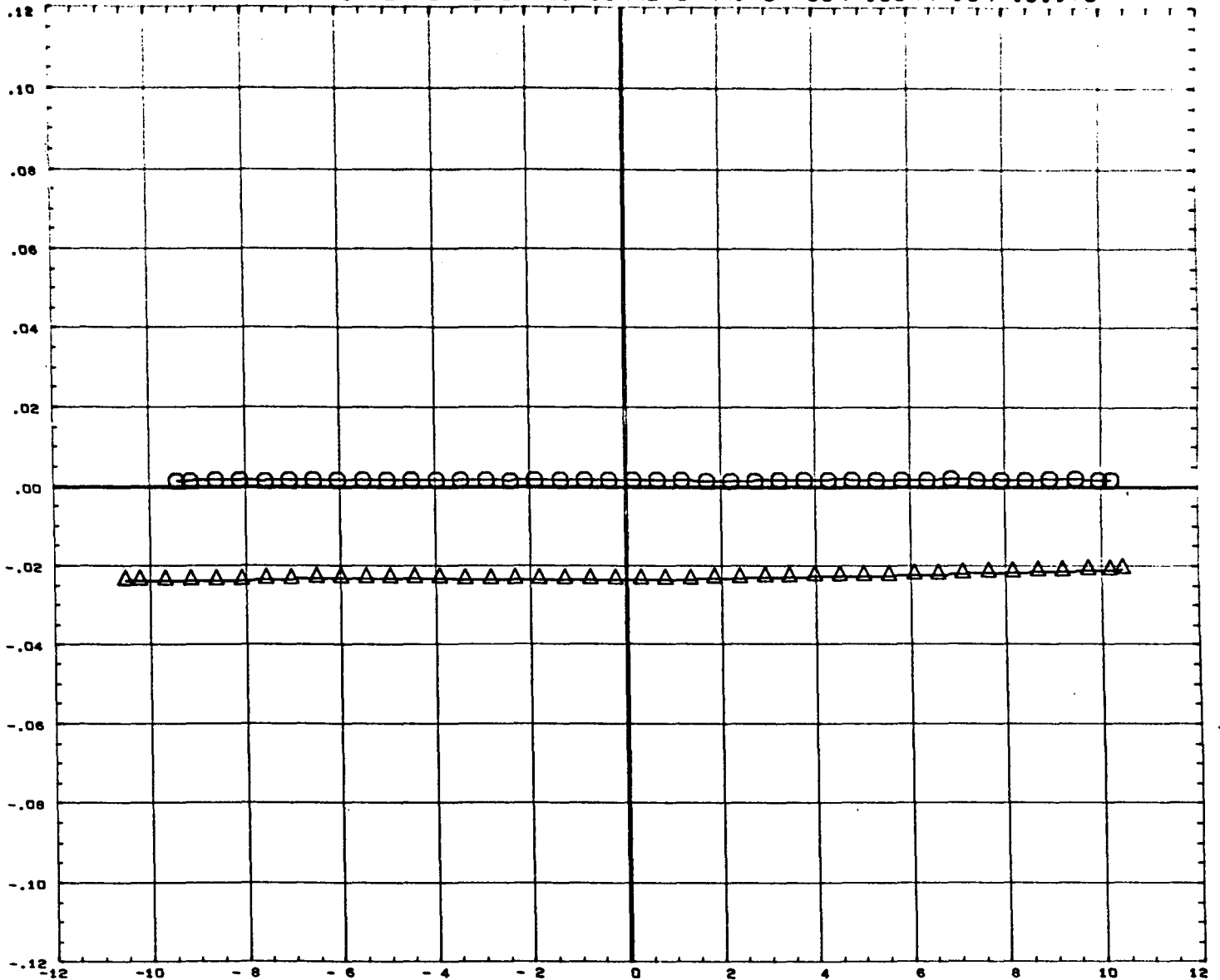
BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060

MACH 2.20



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# EFFECTS OF BETA = 6 ON LATERAL-DIRECTIONAL CHAR. OF CONFIGURATION (01)T3

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (RD7483)  MDAC S-222 COMPOSITE (T-CG) (01)T3  
 (RD7485)  MDAC S-222 COMPOSITE (T-CG) (01)T3

BETA ELEVTR AILRON RUDDER  
 0.000 0.000 0.000 0.000  
 6.000 0.000 0.000 0.000

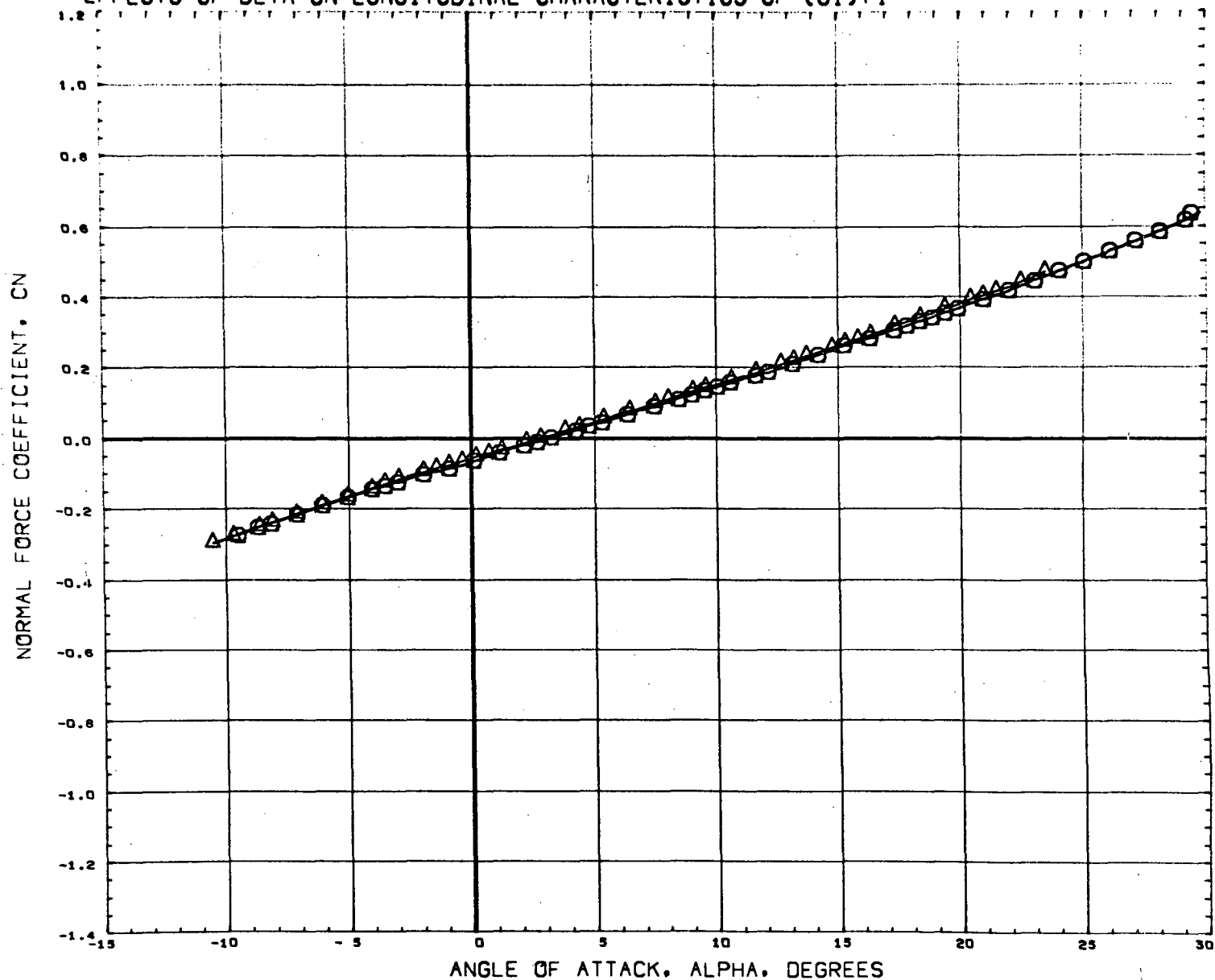
REFERENCE INFORMATION  
 SREF 3155.3040 SQ.FT.  
 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (O1)T4



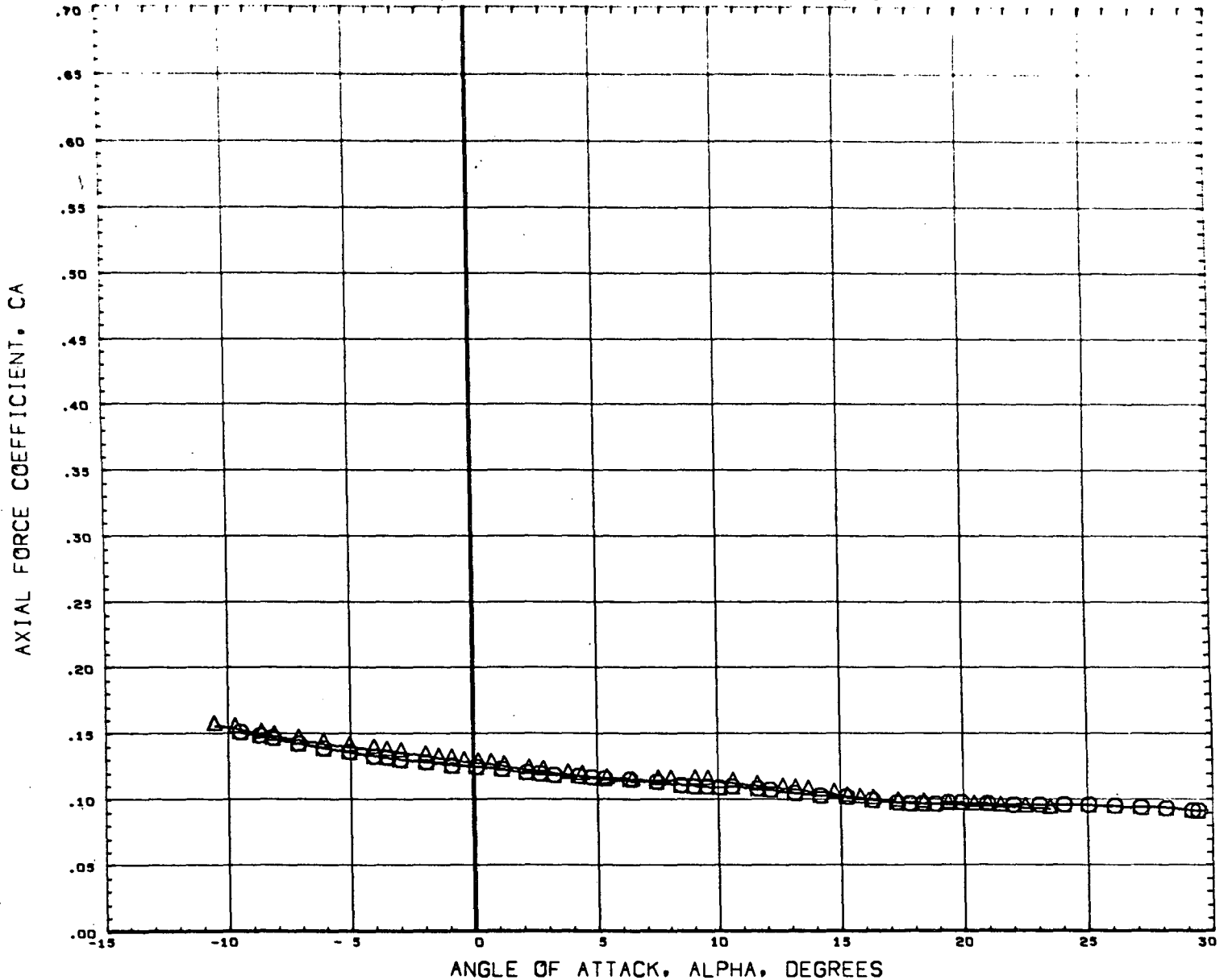
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD74E2)	MDAC S-222 COMPOSITE (T-CG) (O1)T4
(CD74E3)	MDAC S-222 COMPOSITE (T-CG) (O1)T4

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060 SCALE

MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (01)T4

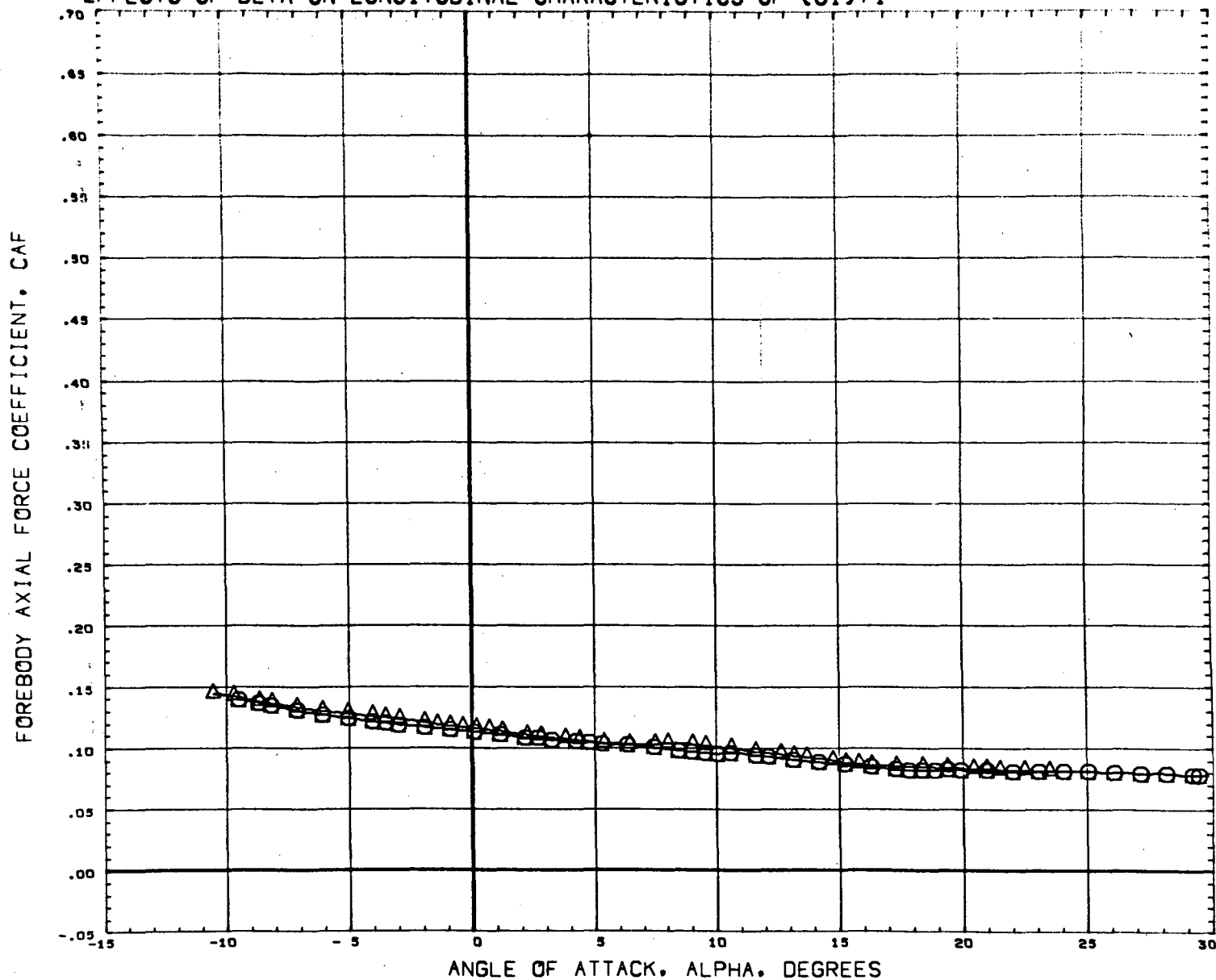


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
(C074E2)	MDAC S-222 COMPOSITE(T-CG) (01)T4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(C074E3)	MDAC S-222 COMPOSITE(T-CG) (01)T4	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060 SCALE



MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (O1)T4



DATA SET SYMBOL CONFIGURATION DESCRIPTION

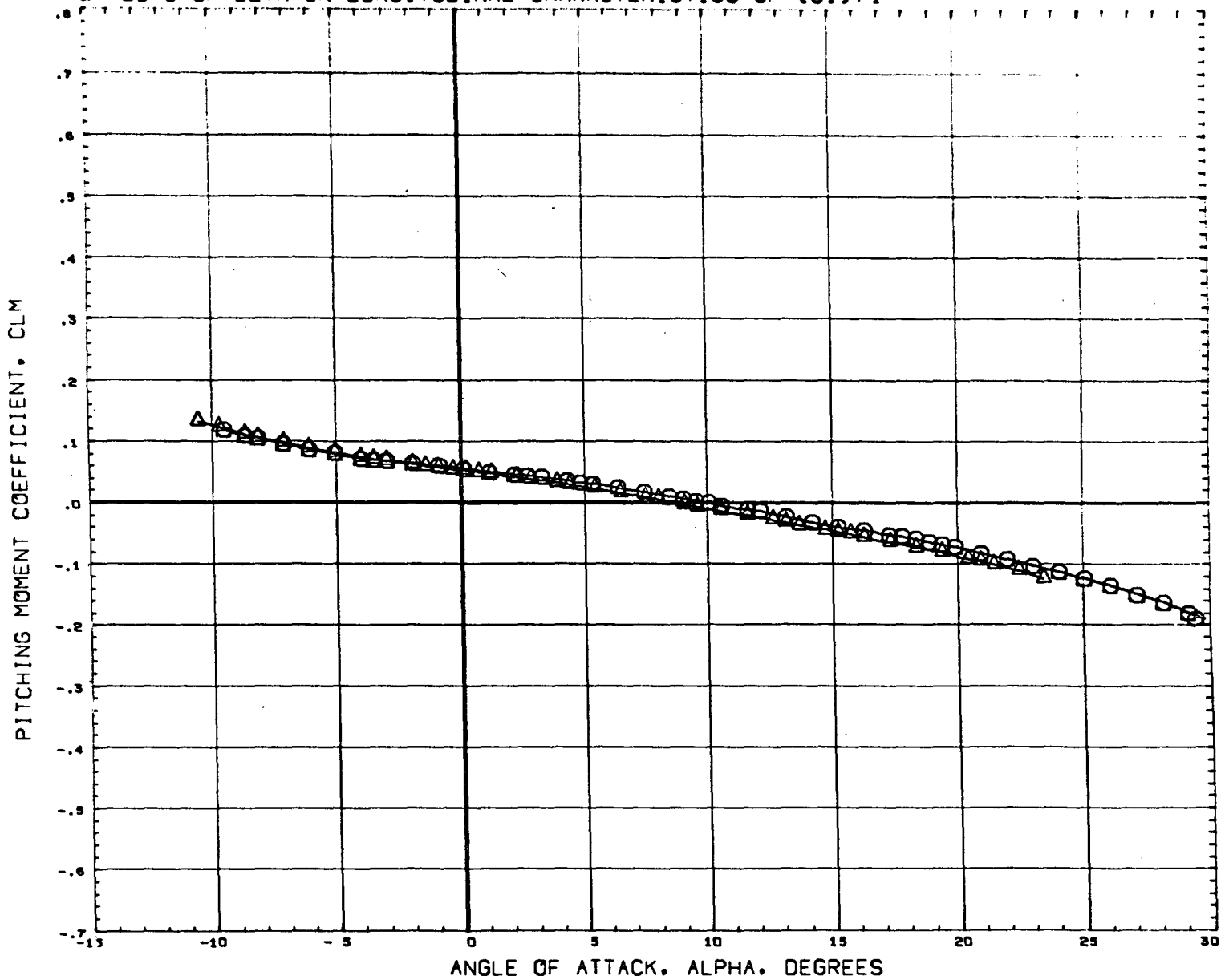
(CD74E2)  MDAC S-222 COMPOSITE (T-CG) (O1)T4  
 (CD74E3)  MDAC S-222 COMPOSITE (T-CG) (O1)T4

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION		
0.000	0.000	0.000	0.000	SREF	3155.3040	SO.FT.
6.000	0.000	0.000	0.000	LREF	609.5004	IN.
				BREF	882.0004	IN.
				XMRP	557.0004	IN.
				YMRP	0.0000	IN.
				ZMRP	200.0004	IN.
				SCALE	0.0060	SCALE

MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (O1)T4

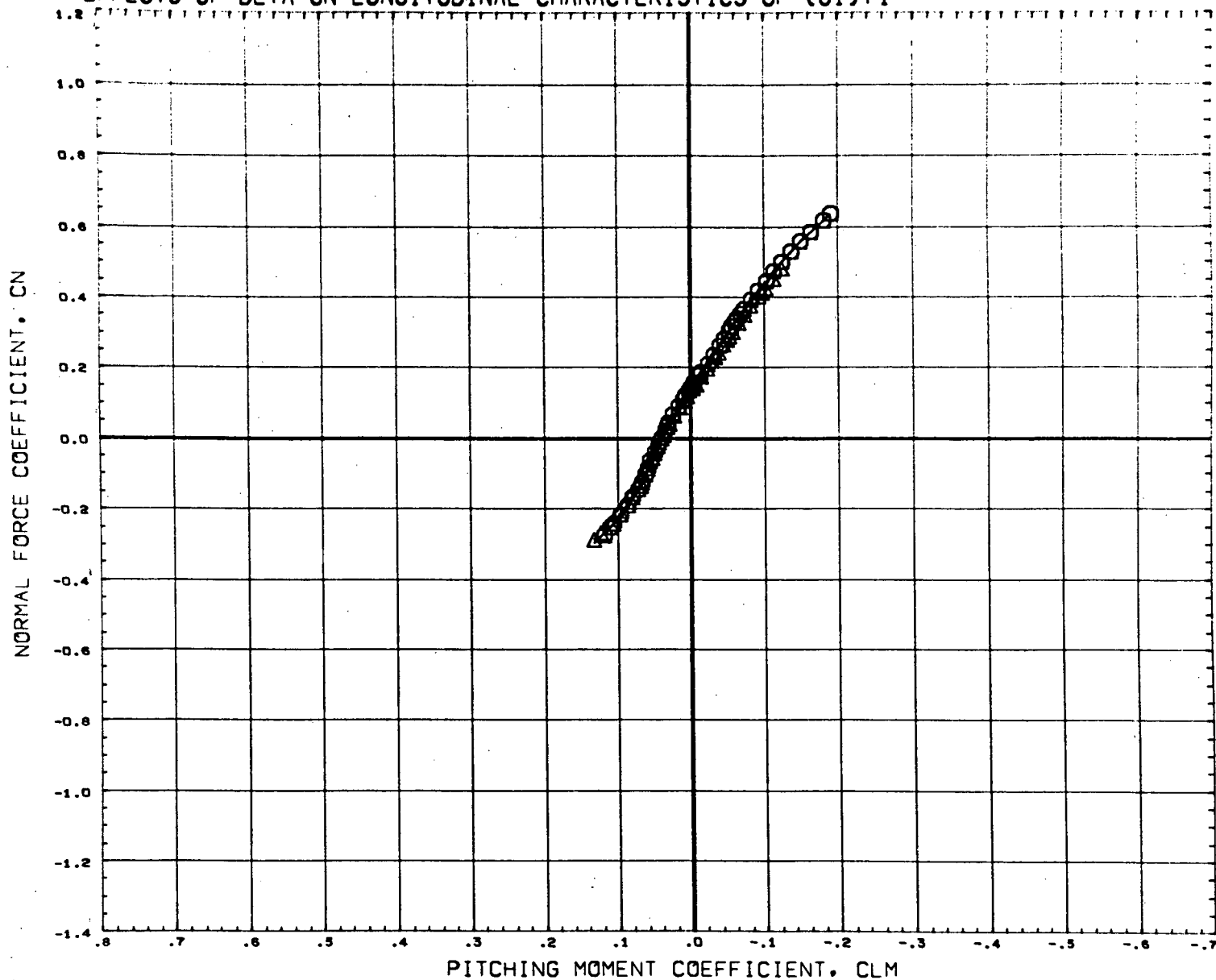


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(CD74E2)	MDAC S-222 COMPOSITE (T-CG) (O1)T4	0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
(CD74E3)	MDAC S-222 COMPOSITE (T-CG) (O1)T4	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						YMRP	557.0004 IN.
						ZMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060 SCALE

MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (O1)T4



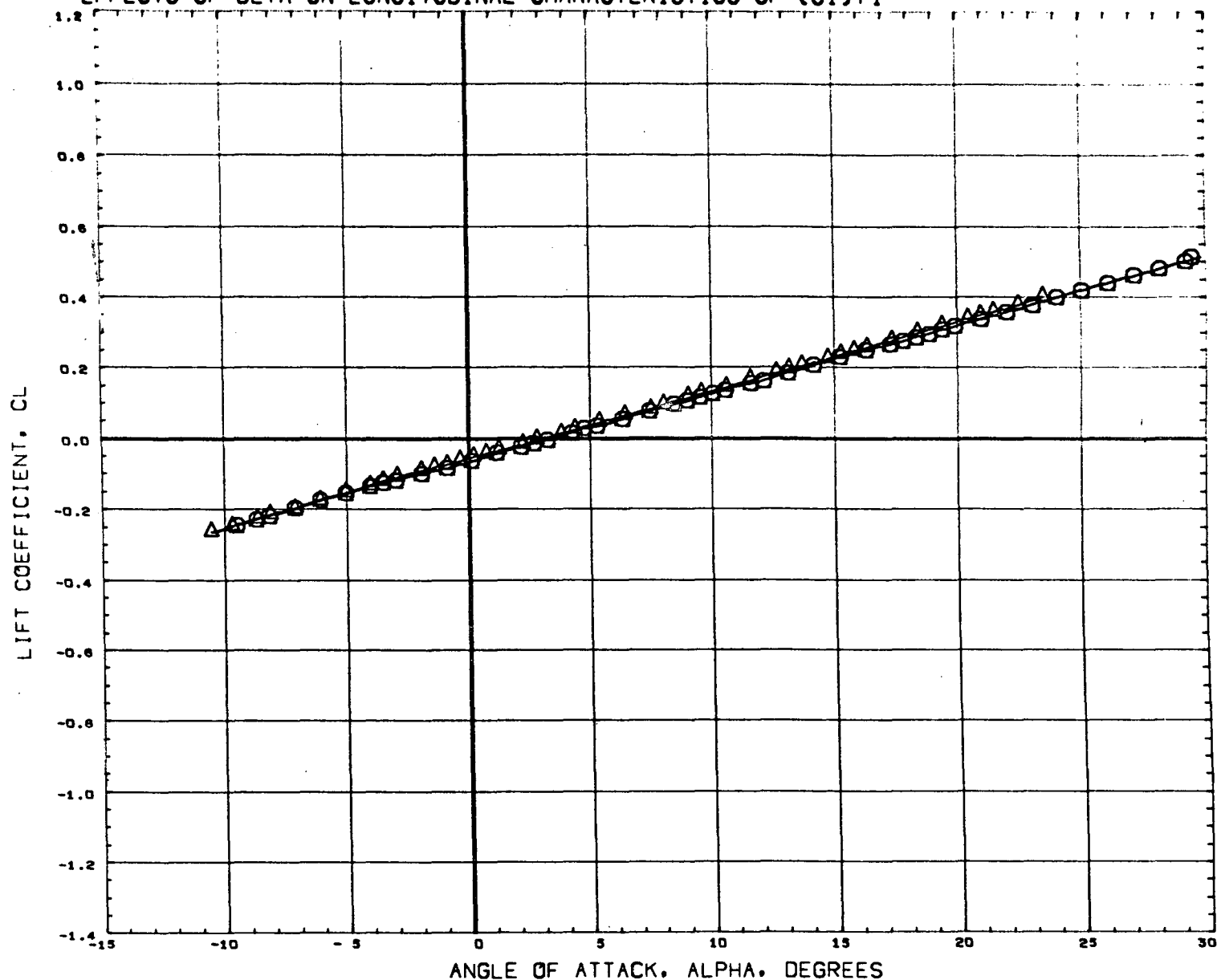
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 (CD74E3)  $\triangle$  MDAC S-222 COMPOSITE (T-CG) (O1)T4

BETA	ELEVTR	AILRON	RUDDER	REFERENCE INFORMATION	
0.000	0.000	0.000	0.000	SREF	3155.3040 SQ.FT.
6.000	0.000	0.000	0.000	LREF	609.5004 IN.
				BREF	882.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060 SCALE

MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (O1)T4



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD74E2) MDAC S-222 COMPOSITE (T-CG) (O1)T4  
 (CD74E3) MDAC S-222 COMPOSITE (T-CG) (O1)T4

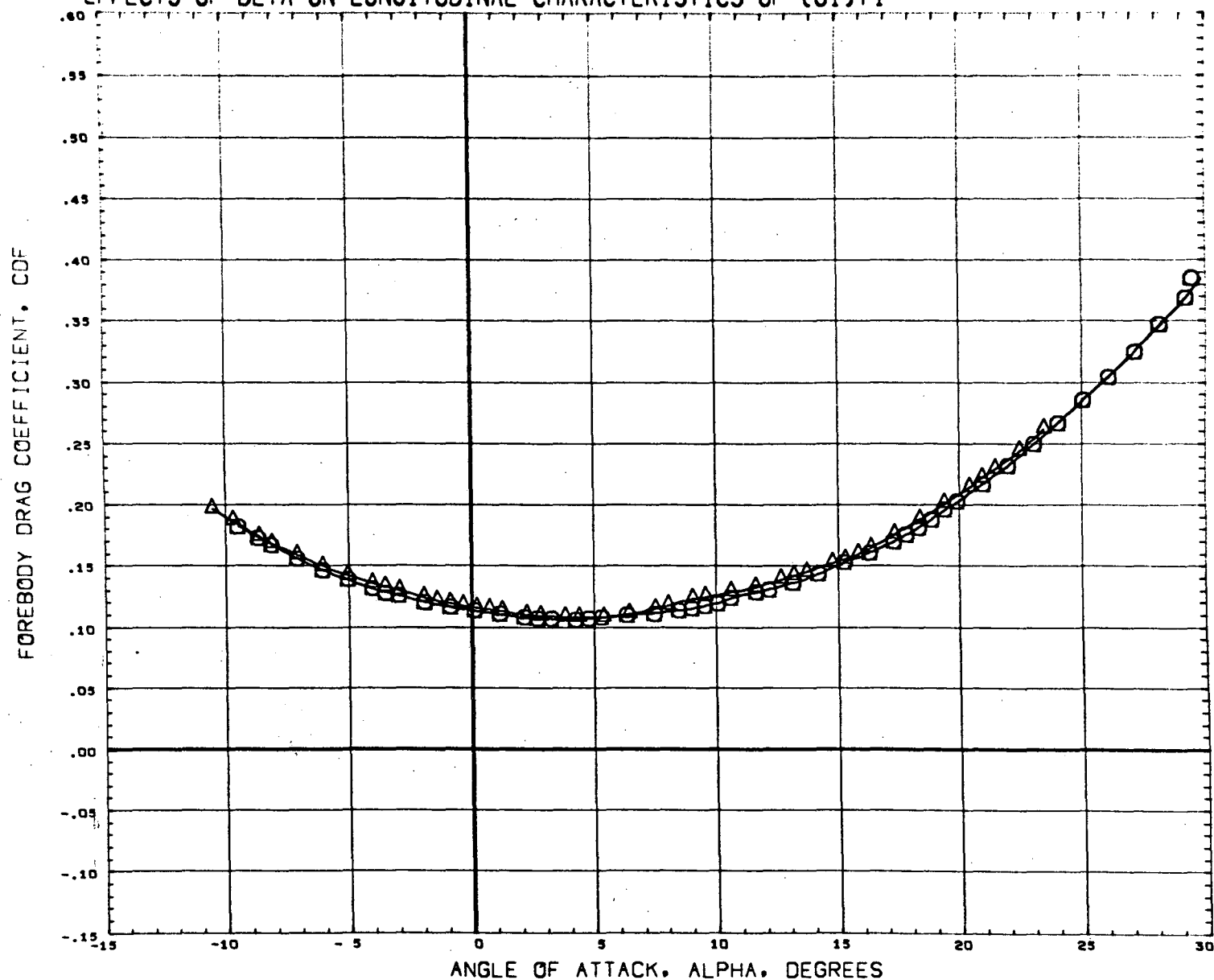
BETA ELEVTR AILRON RUDDER  
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REFERENCE INFORMATION  
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 LREF 609.5004 IN.  
 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060 SCALE

MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (01)T4



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (CD74E2) (0) MDAC S-222 COMPOSITE (T-CG) (01)T4  
 (CD74E3) (1) MDAC S-222 COMPOSITE (T-CG) (01)T4

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 6.000 0.000 0.000 0.000

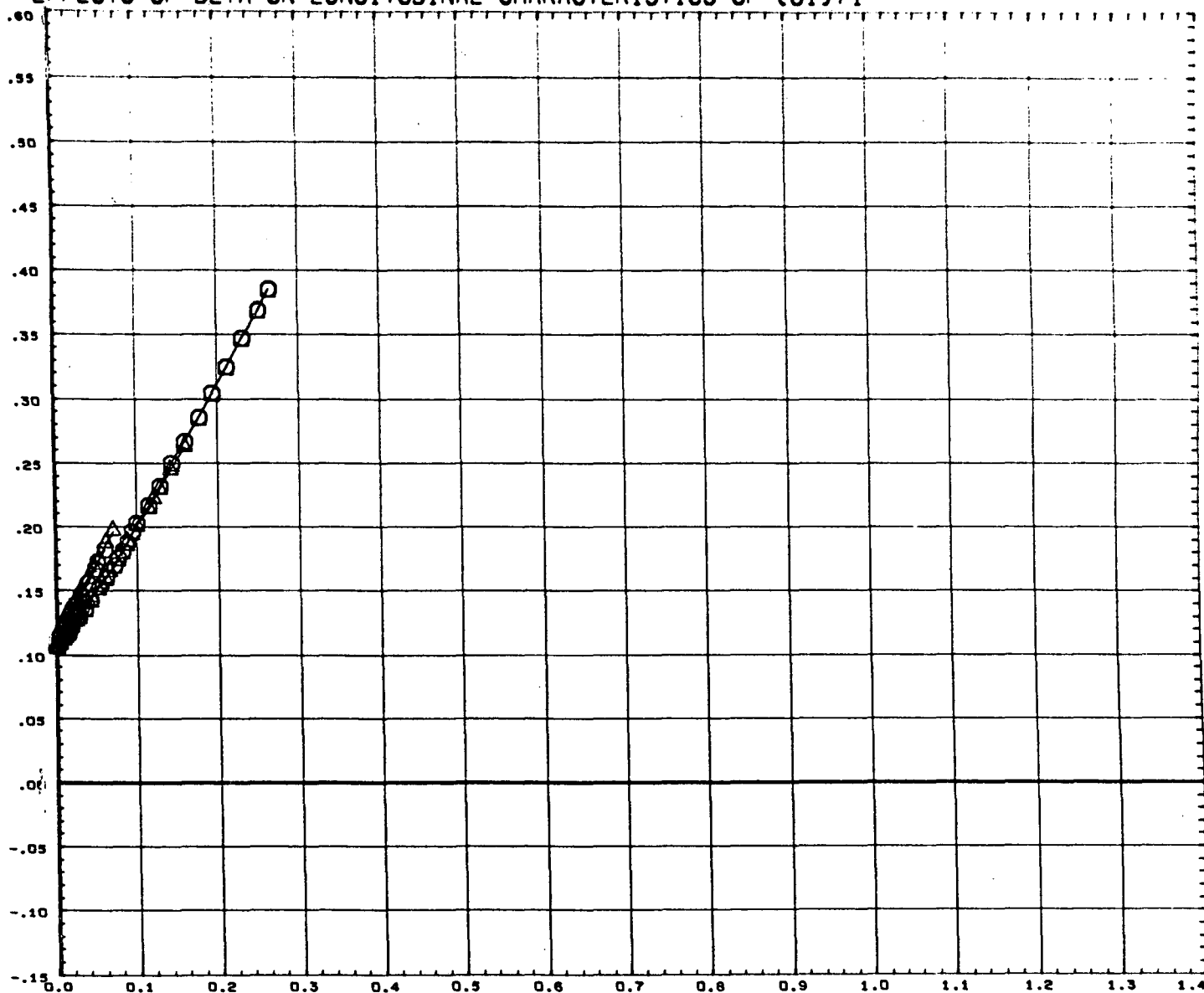
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 ZMRP 200.0004 IN.  
 SCALE 0.0060 SCALE

MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (01)T4

FOREBODY DRAG COEFFICIENT, CDF



LIFT COEFFICIENT SQUARED, CLSQR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CD74E2)	MDAC S-222 COMPOSITE(T-CG) (01)T4
(CD74E3)	MDAC S-222 COMPOSITE(T-CG) (01)T4

BETA	ELEVTR	AILRON	RUDDER
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6.000	0.000	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
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ZMRP	200.0004	IN.
SCALE	0.0060	SCALE

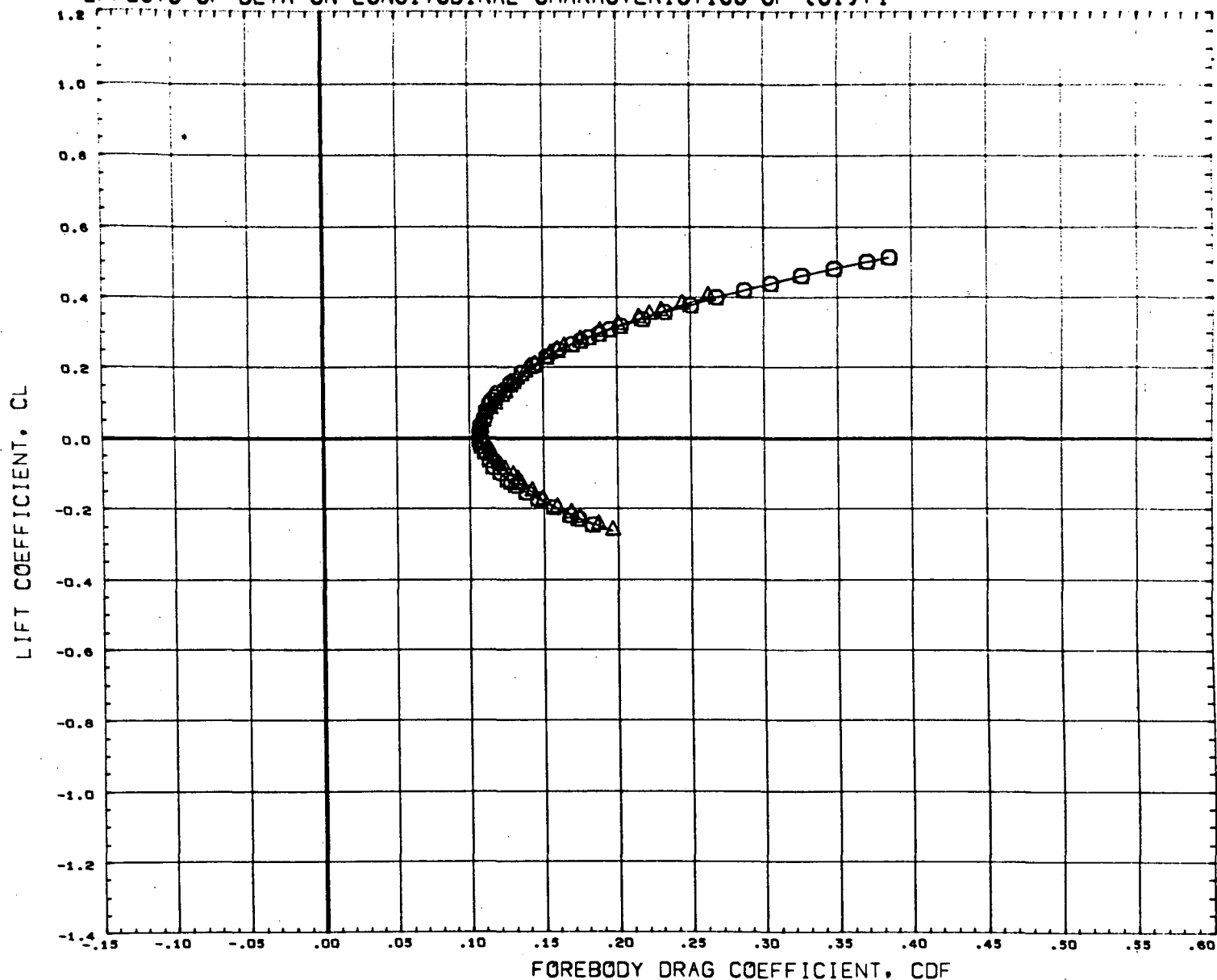
MACH

4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (O1)T4



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
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 (CD74E3) MDAC S-222 COMPOSITE (T-CG) (O1)T4

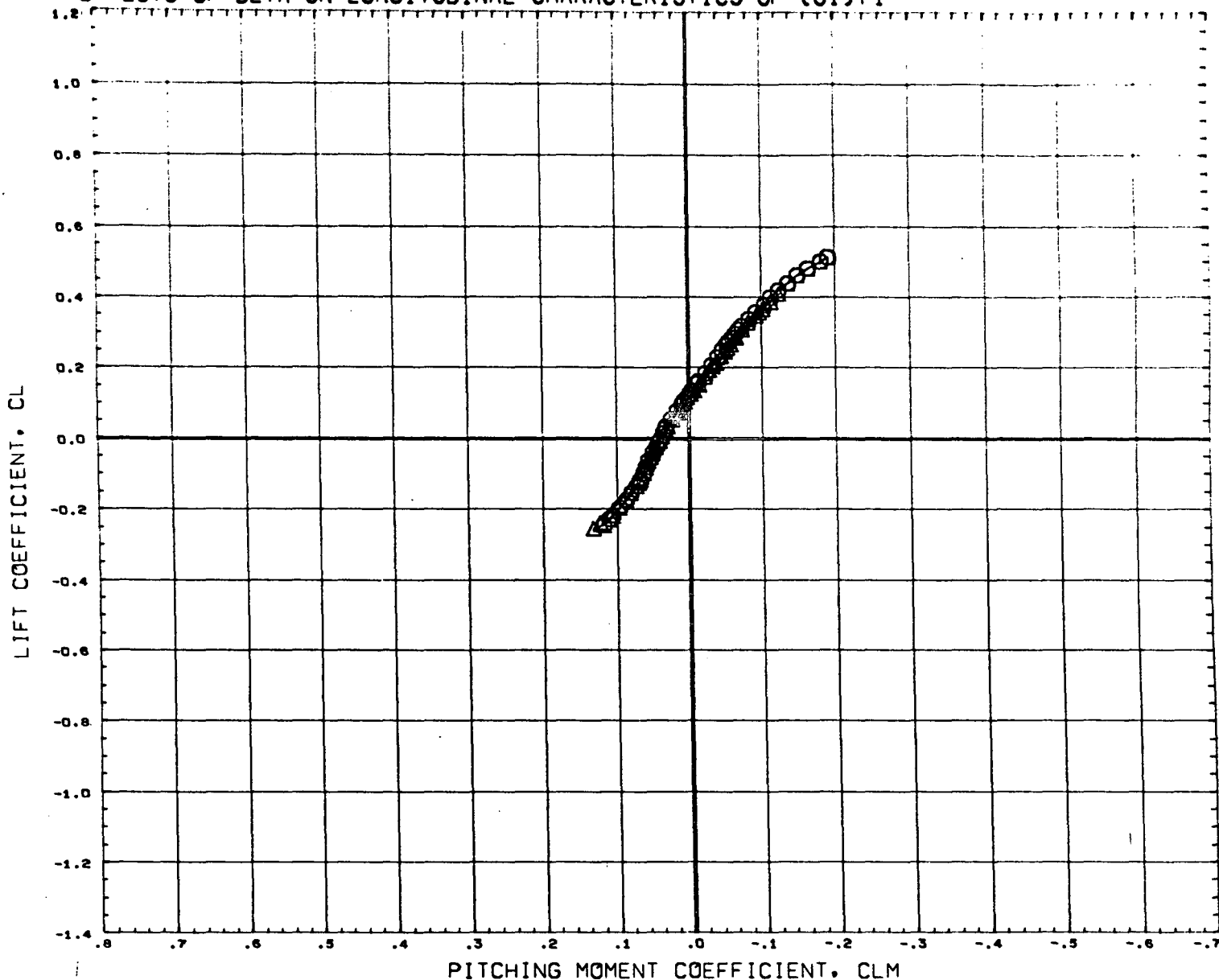
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 6.000 0.000 0.000 0.000

REFERENCE INFORMATION  
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 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060 SCALE

MACH 4.47

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# EFFECTS OF BETA ON LONGITUDINAL CHARACTERISTICS OF (O1)T4



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
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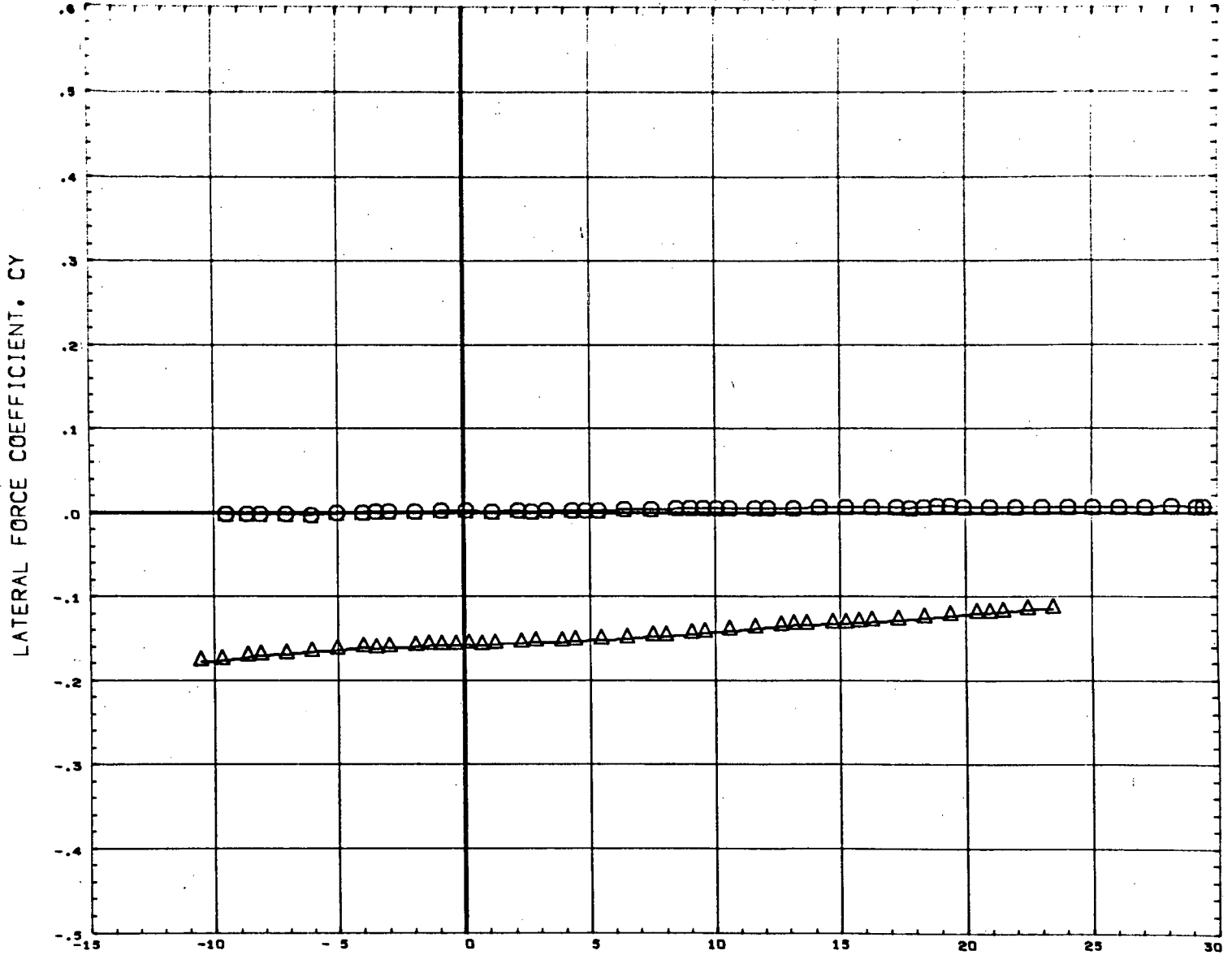
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 6.000 0.000 0.000 0.000

REFERENCE INFORMATION  
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 BREF 882.0004 IN.  
 XMRP 557.0004 IN.  
 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060 SCALE

MACH 4.47

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# EFFECTS OF BETA ON LATERAL-DIRECTIONAL CHARACTERISTICS OF (O1)T4



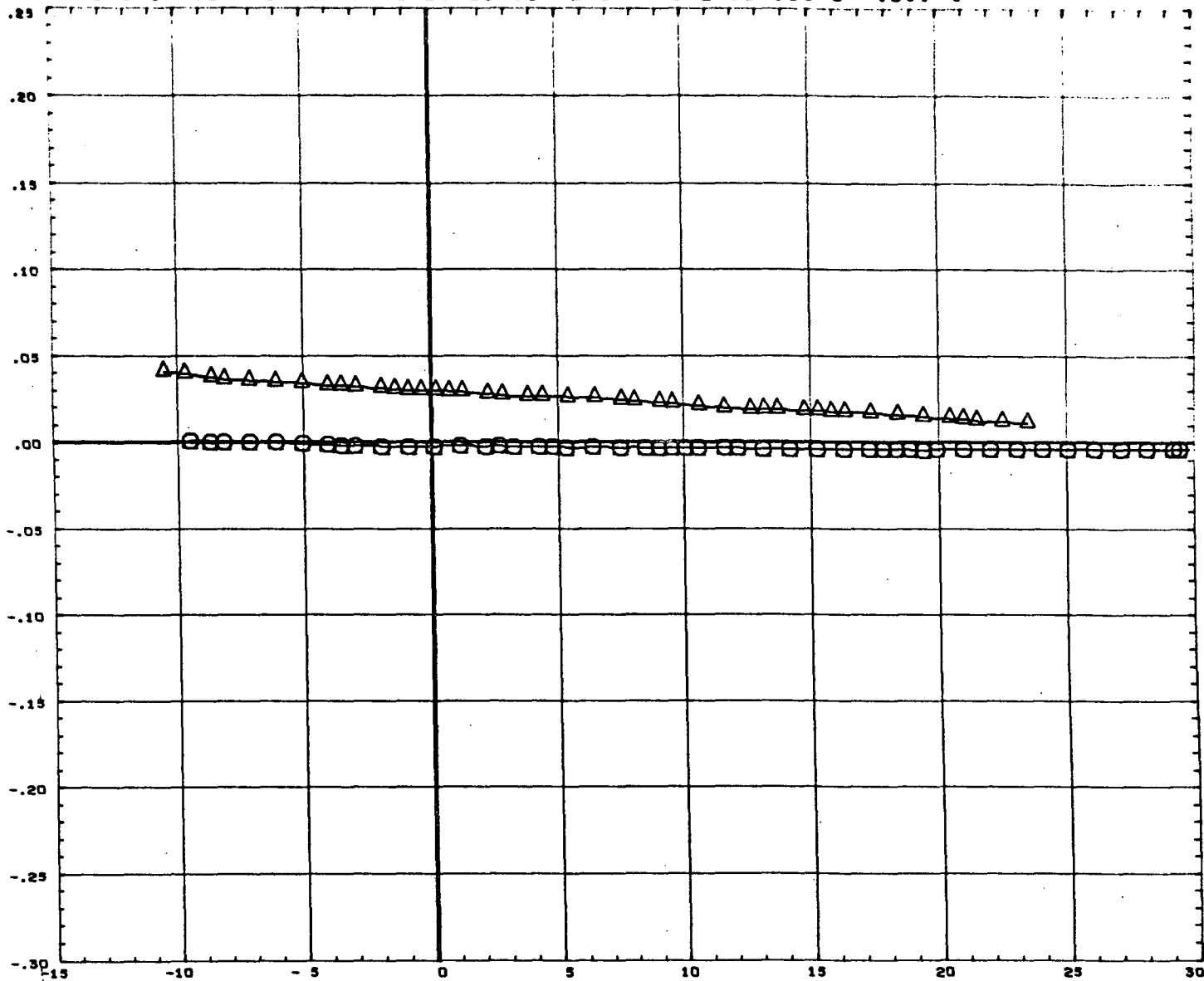
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(R074E3)	MDAC S-222 COMPOSITE (T-CG) (O1)T4	6.000	0.000	0.000	0.000	LREF	609.5004 IN.
						BREF	882.0004 IN.
						XMRP	557.0004 IN.
						YMRP	0.0000 IN.
						ZMRP	200.0004 IN.
						SCALE	0.0060 SCALE

MACH 4.47

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# EFFECTS OF BETA ON LATERAL-DIRECTIONAL CHARACTERISTICS OF (01)T4

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



ANGLE OF ATTACK, ALPHA, DEGREES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD74E2) MDAC S-222 COMPOSITE (T-CG) (01)T4  
(RD74E3) MDAC S-222 COMPOSITE (T-CG) (01)T4

BETA ELEVTR AILRON RUDDER  
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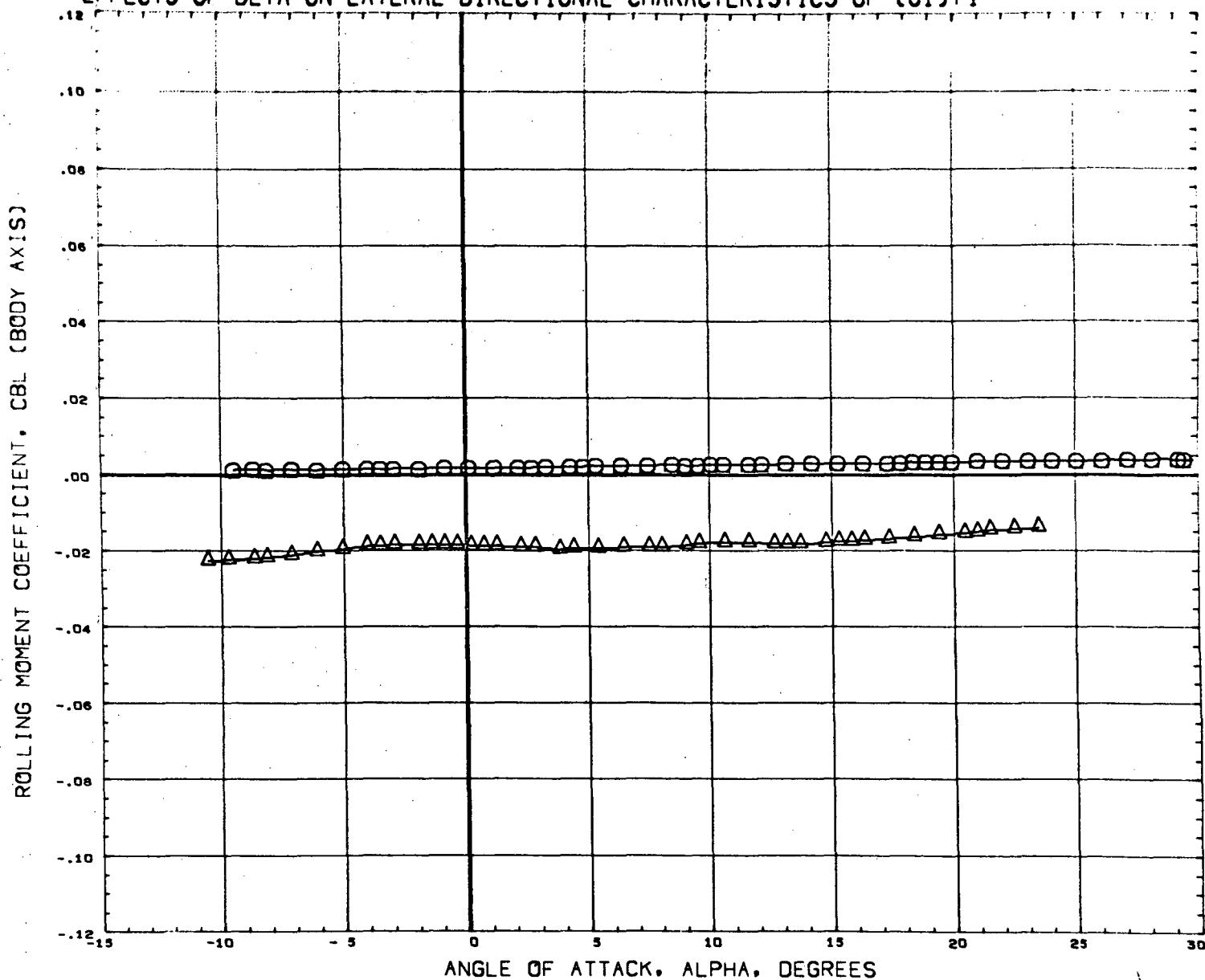
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ZMRP 200.0004 IN.  
SCALE 0.0060 SCALE

MACH

4.47

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# EFFECTS OF BETA ON LATERAL-DIRECTIONAL CHARACTERISTICS OF (01)T4



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
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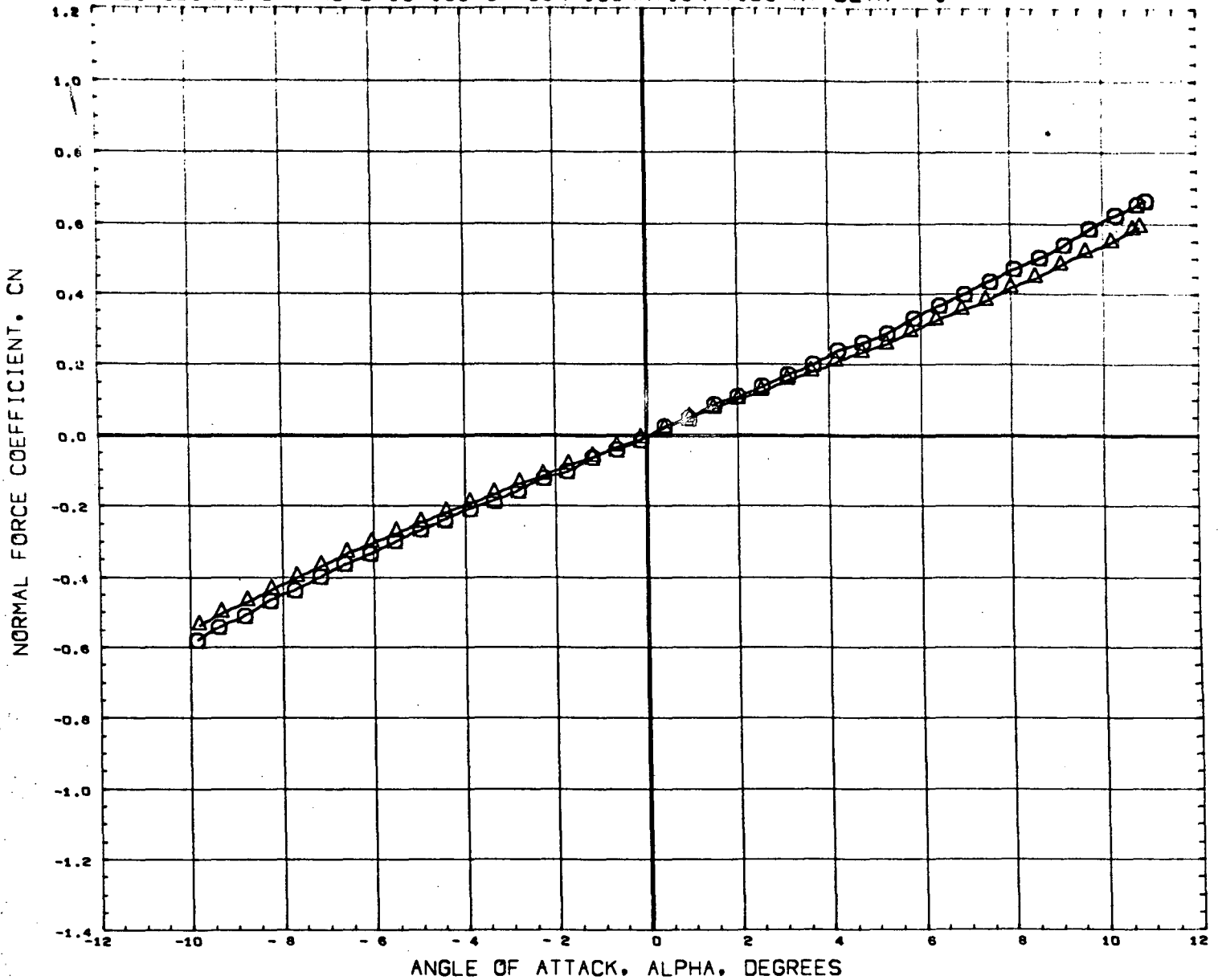
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				BREF	862.0004 IN.
				XMRP	557.0004 IN.
				YMRP	0.0000 IN.
				ZMRP	200.0004 IN.
				SCALE	0.0060 SCALE

MACH

4.47

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



SYMBOL MACH BETA PARAMETRIC VALUES  
 O 1.507 0.000  
 Δ 2.203

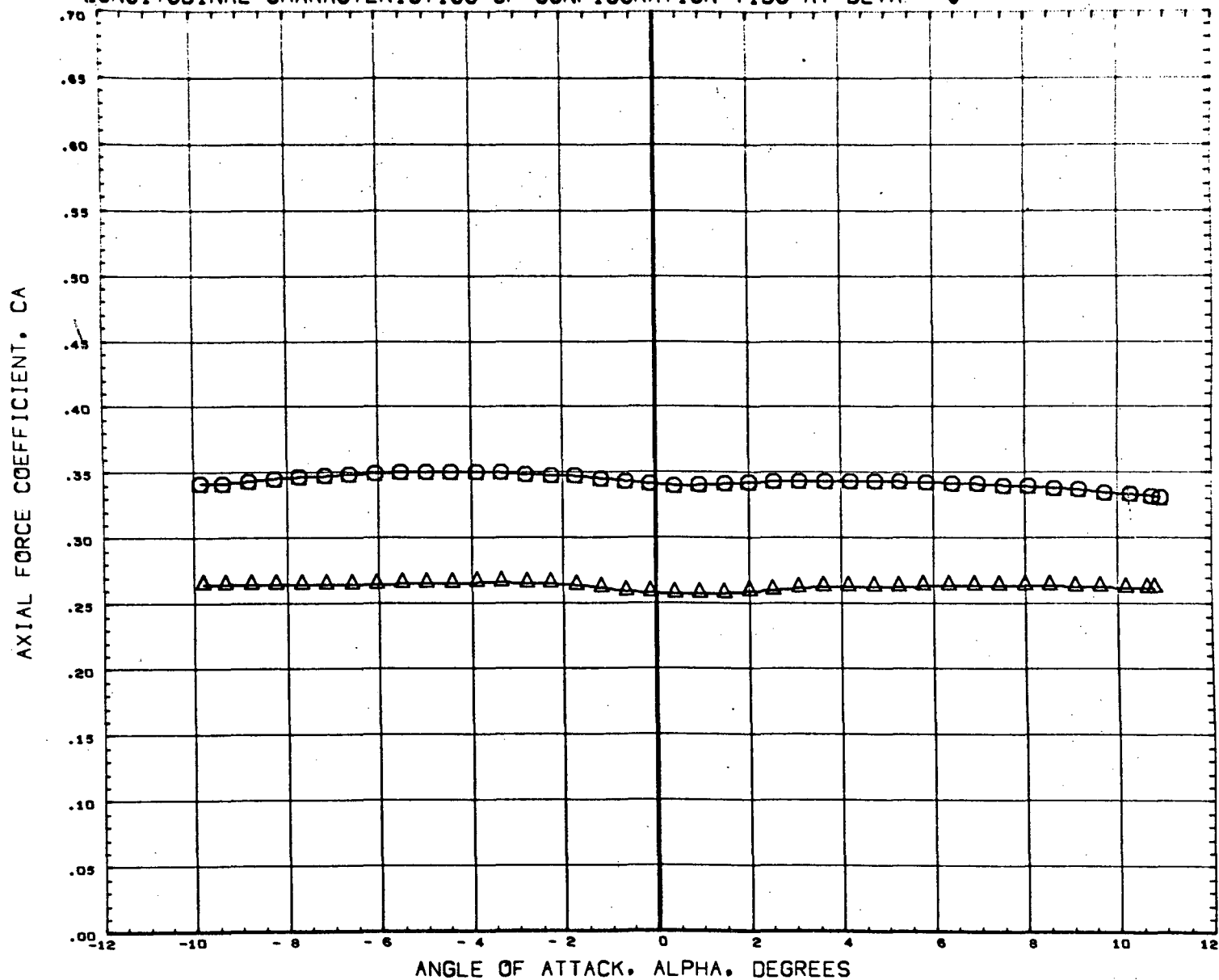
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 ZMRP 200.0004 IN.  
 SCALE 0.0060

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T1B5

(CD7568) 12 SEP 72 PAGE 492

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



SYMBOL    MACH    BETA    PARAMETRIC VALUES  
    1.507    0.000  
    2.203

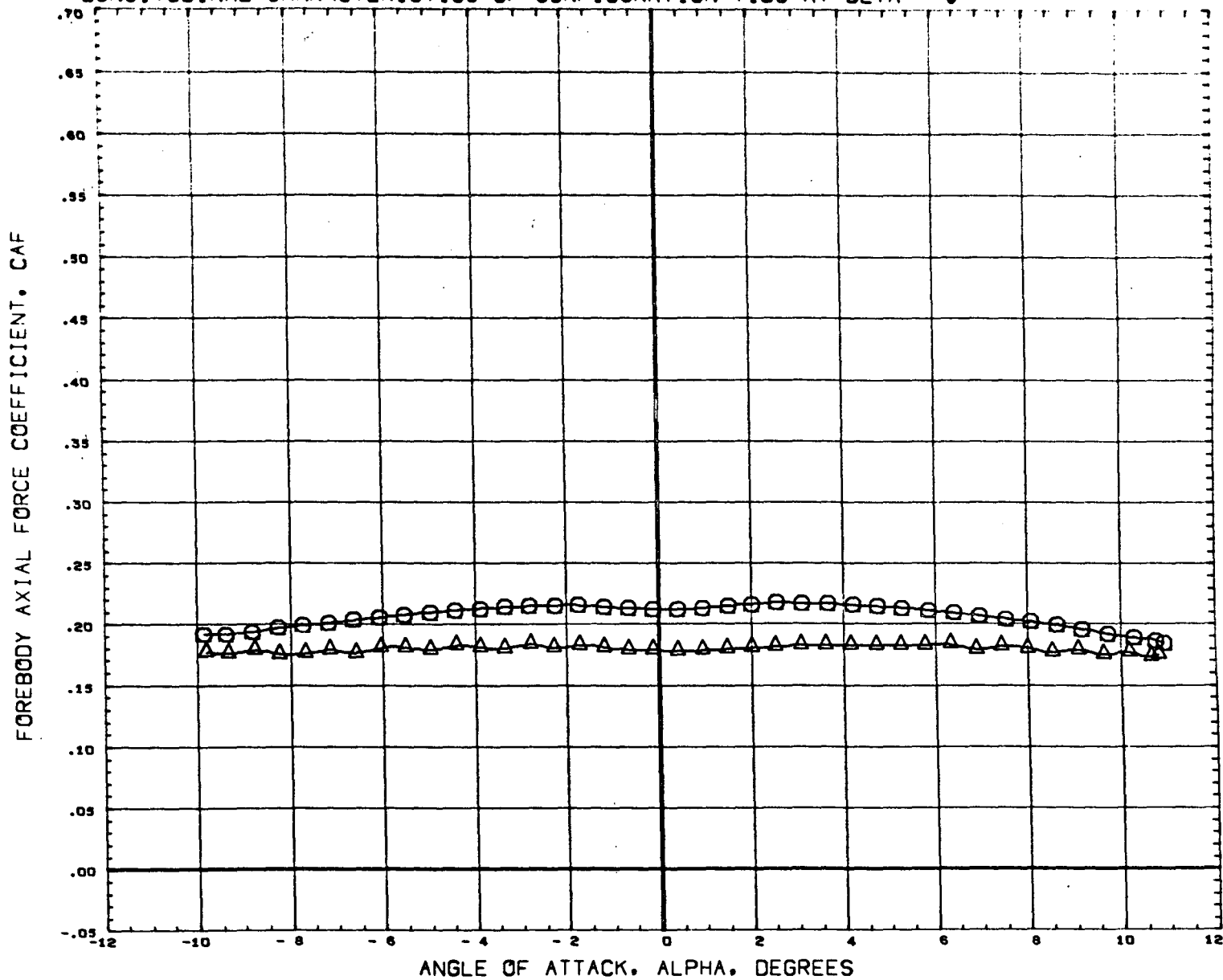
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YMRP    0.0000    IN.  
ZMRP    200.0004    IN.  
SCALE    0.0060

DATA HIST. CODE    TV

MDAC S-222 COMPOSITE(T-CG) T1B5

(CD7568)    12 SEP 72    PAGE    493

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



SYMBOL MACH BETA PARAMETRIC VALUES

○ 1.507 0.000

△ 2.203

REFERENCE INFORMATION

SREF	3155.3040	SQ.FT.
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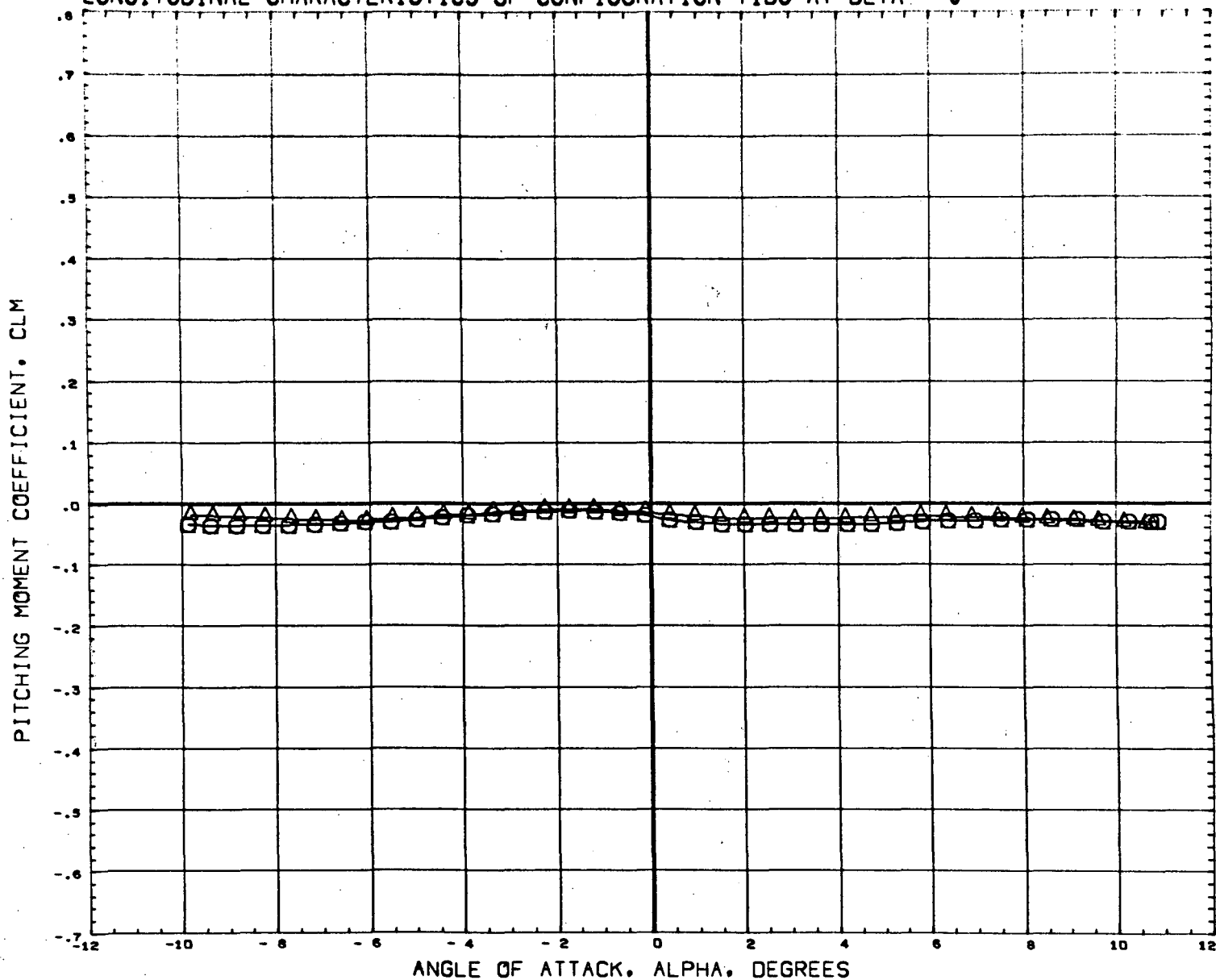
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MDAC S-222 COMPOSITE(T-CG) T1B5

(CD7568) 12 SEP 72 PAGE 494



# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



SYMBOL MACH 1.507 BETA 0.000  
 O 2.203

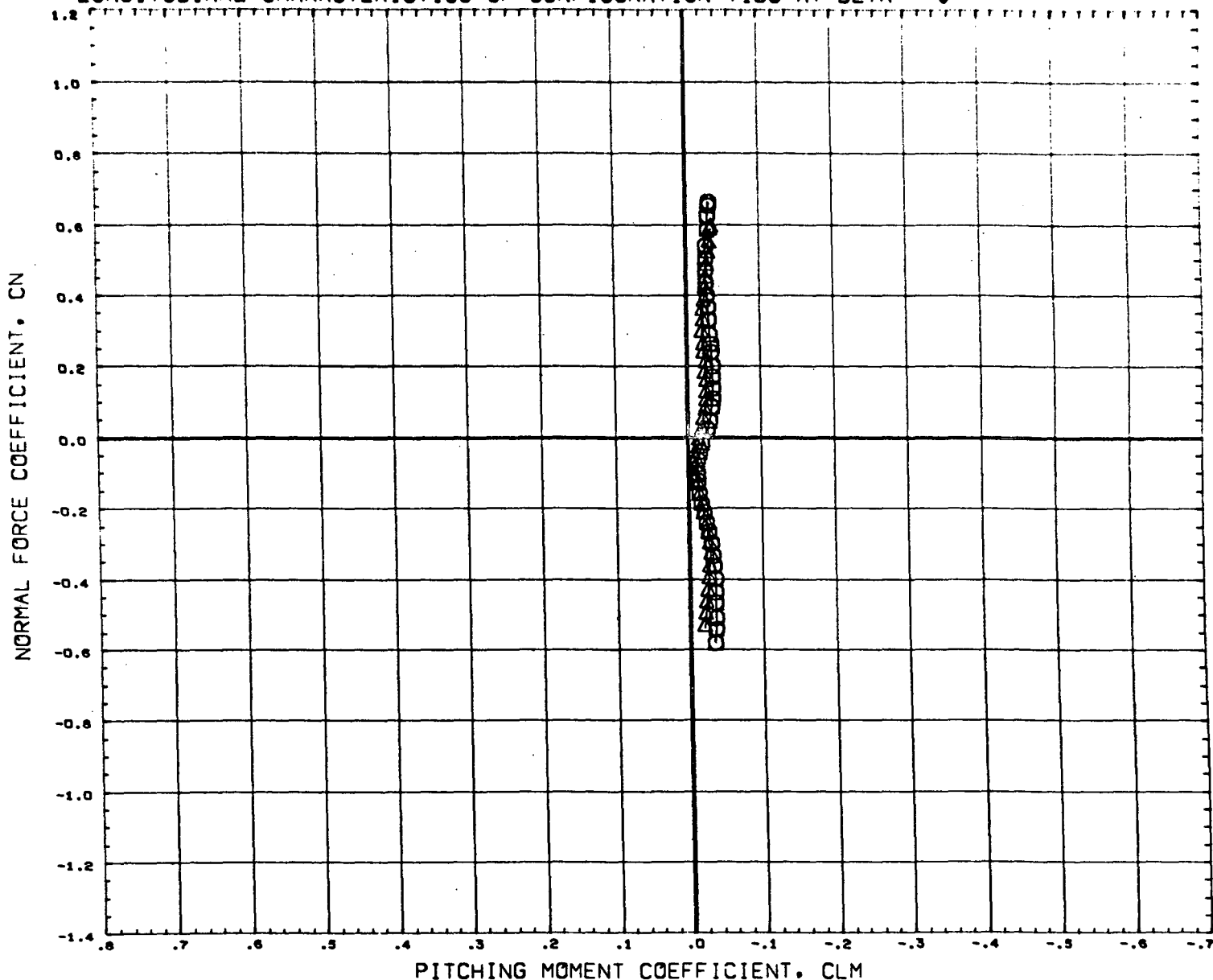
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 YMRP 0.0000 IN.  
 ZMRP 200.0004 IN.  
 SCALE 0.0060

(CD7568) 12 SEP 72 PAGE 495

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



SYMBOL	MACH	BETA	PARAMETRIC VALUES
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△	2.203		

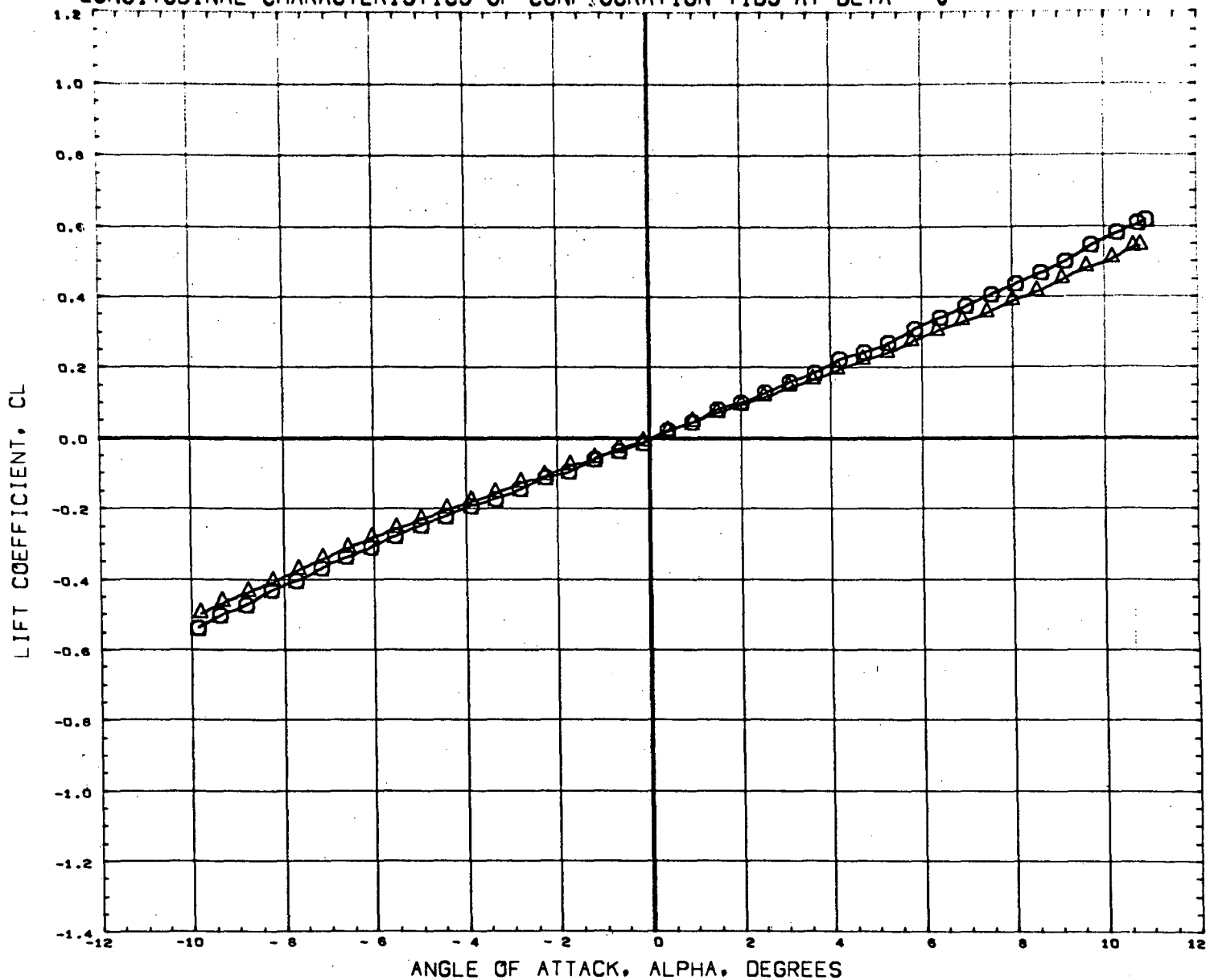
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ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T1B5

(CD7568) 12 SEP 72 PAGE 496

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



SYMBOL MACH BETA PARAMETRIC VALUES  
 O 1.507 0.000  
 Δ 2.203

REFERENCE INFORMATION  
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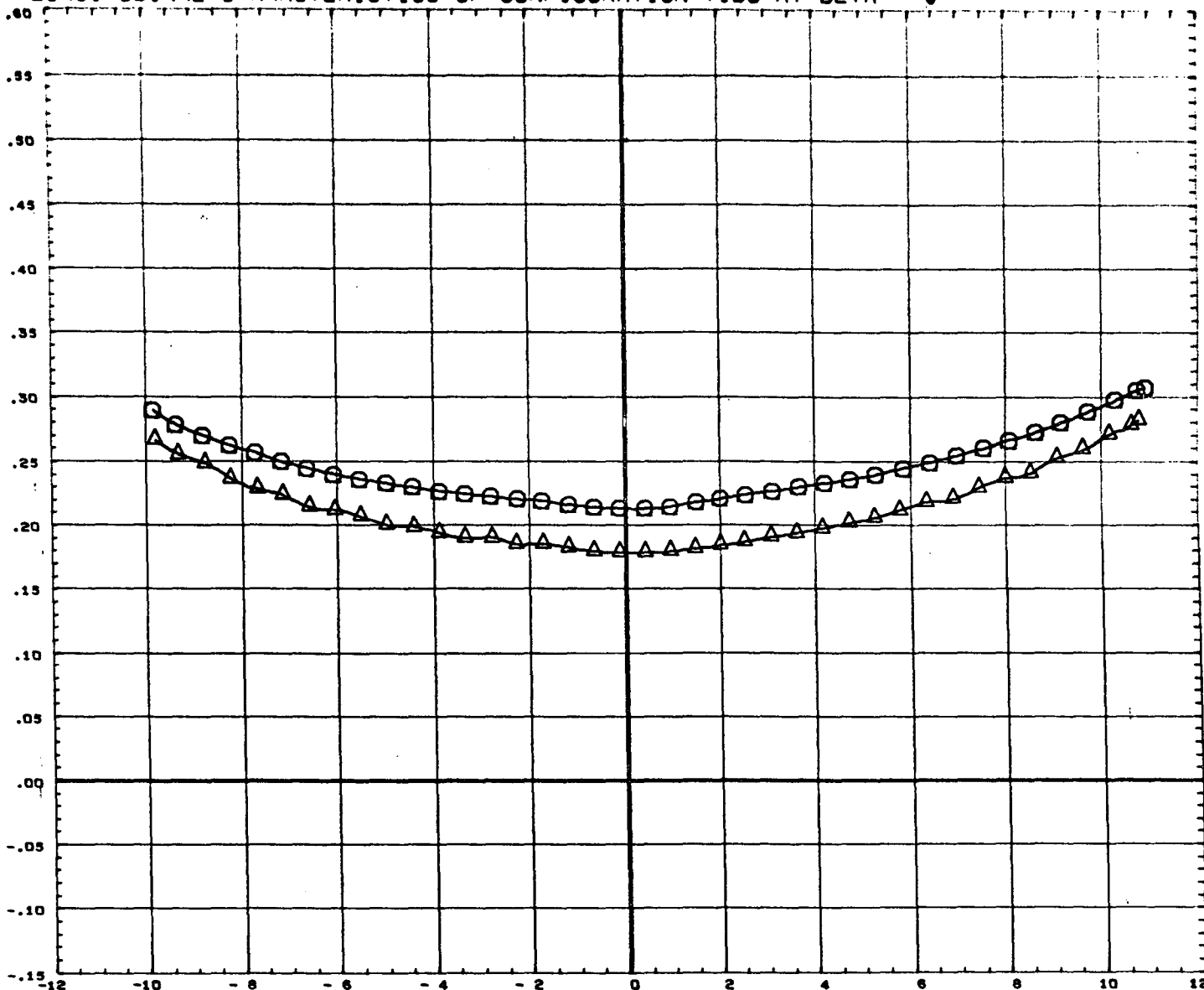
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MDAC S-222 COMPOSITE(T-CG) T1B5

(CD7568) 12 SEP 72 PAGE 497

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



ANGLE OF ATTACK, ALPHA, DEGREES

SYMBOL	MACH	BETA	PARAMETRIC VALUES
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△	2.203		

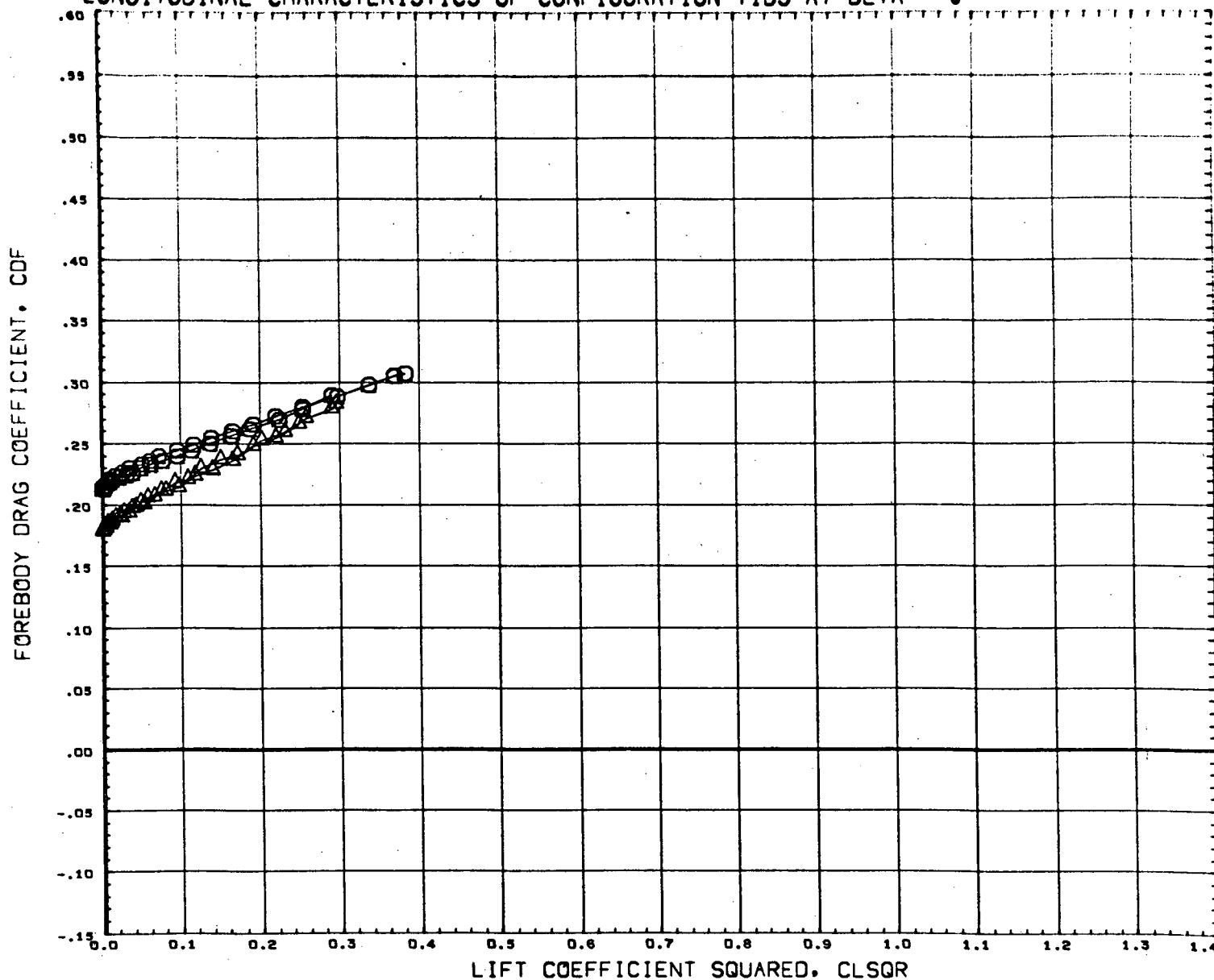
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ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T1B5

(C07568) 12 SEP 72 PAGE 498

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



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△	2.203		

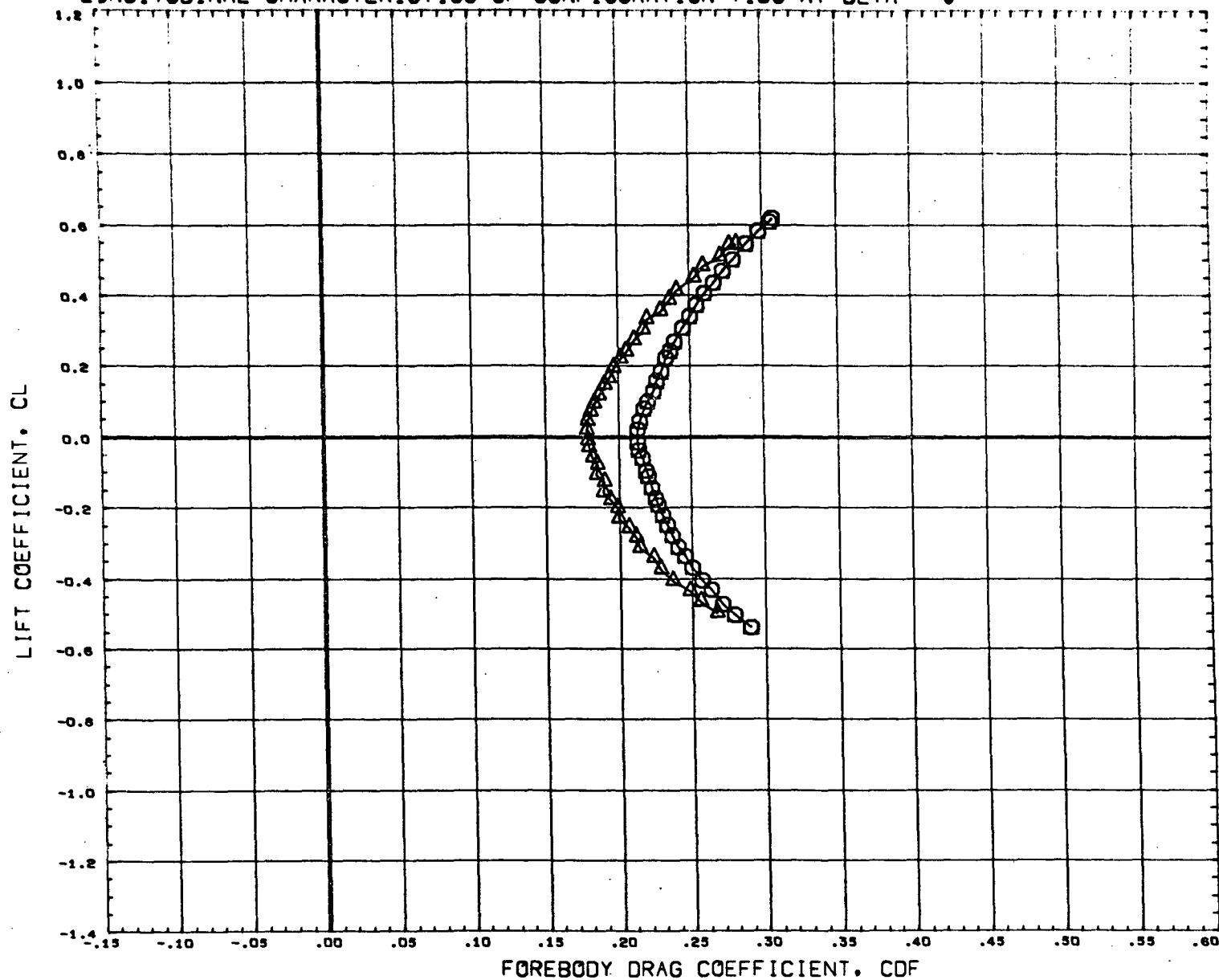
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DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T1B5

(CD7568) 12 SEP 72 PAGE 499

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



SYMBOL MACH BETA PARAMETRIC VALUES  
 O 1.507  
 Δ 2.203

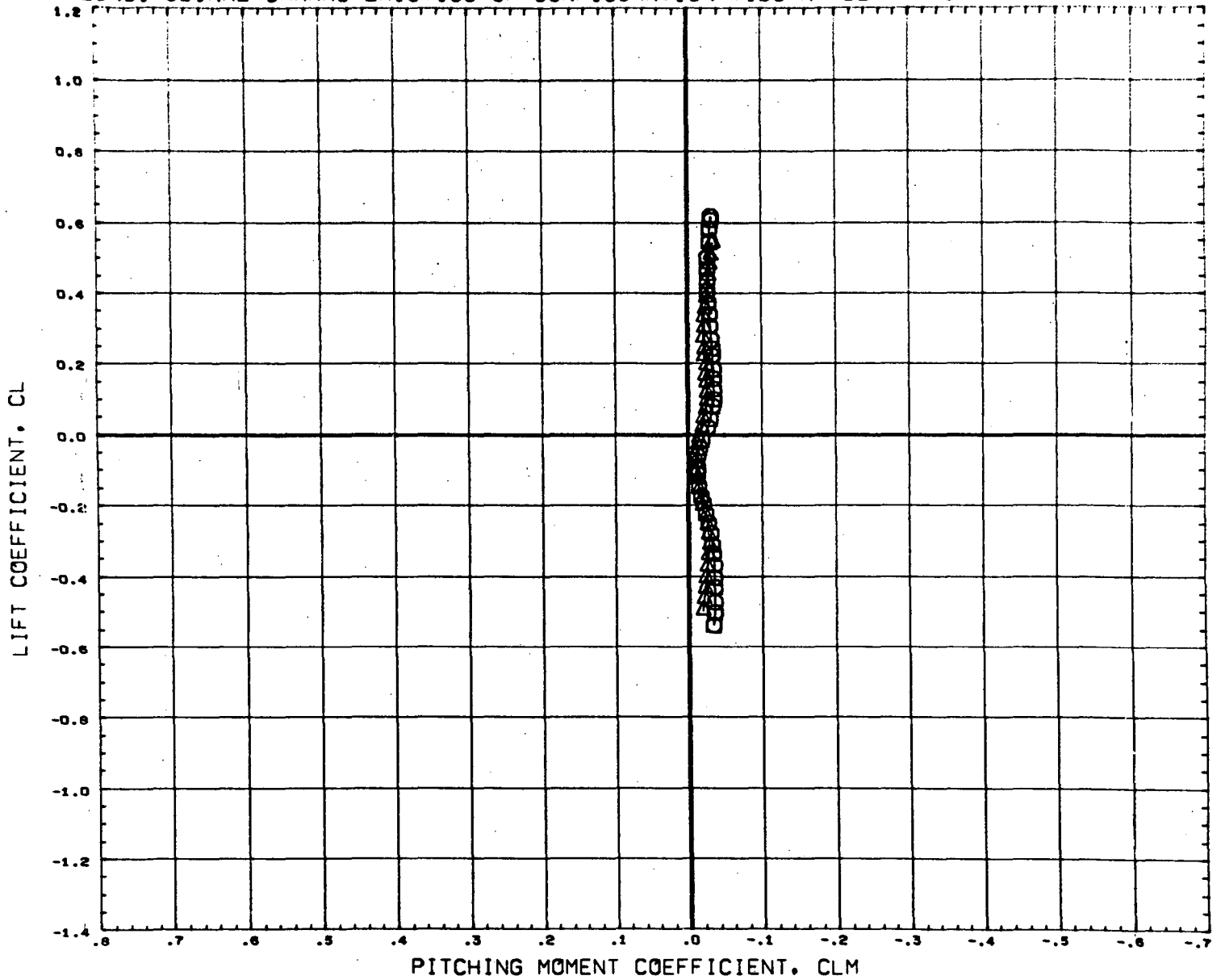
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 SCALE 0.0060

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T1B5

(CD7568) 12 SEP 72 PAGE 500

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B5 AT BETA = 0



SYMBOL MACH BETA PARAMETRIC VALUES  
 O 1.507  
 Δ 2.203

DATA HIST. CODE TV

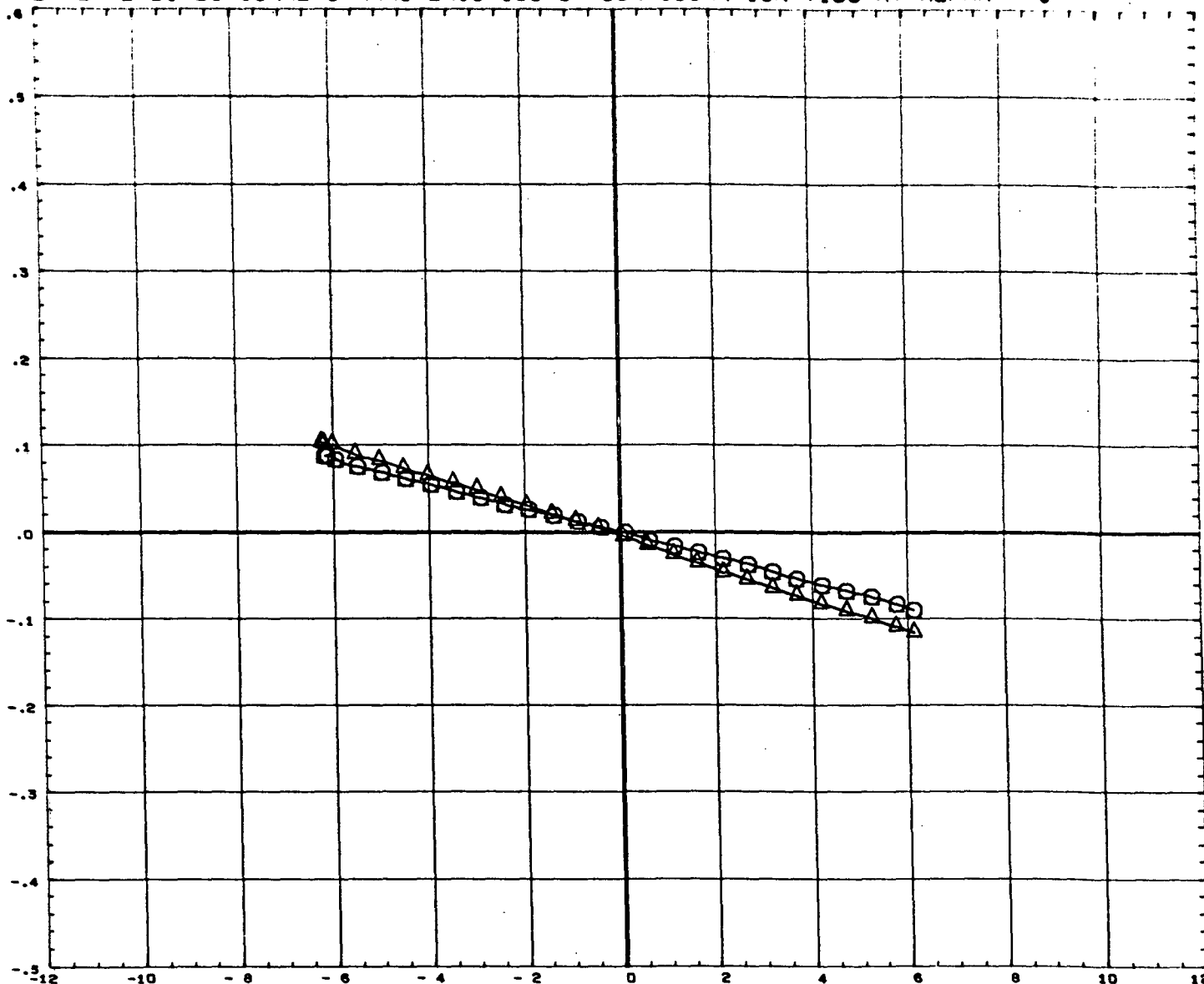
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 ZMRP 200.0004 IN.  
 SCALE 0.0060

MDAC S-222 COMPOSITE(T-CG) T1B5

(CD7568) 12 SEP 72 PAGE 501

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T1B5 AT ALPHA = 0

LATERAL FORCE COEFFICIENT, CY



SIDE SLIP ANGLE, BETA, DEGREES

SYMBOL MACH ALPHA PARAMETRIC VALUES  
 O 1.507  
 Δ 2.203

REFERENCE INFORMATION  
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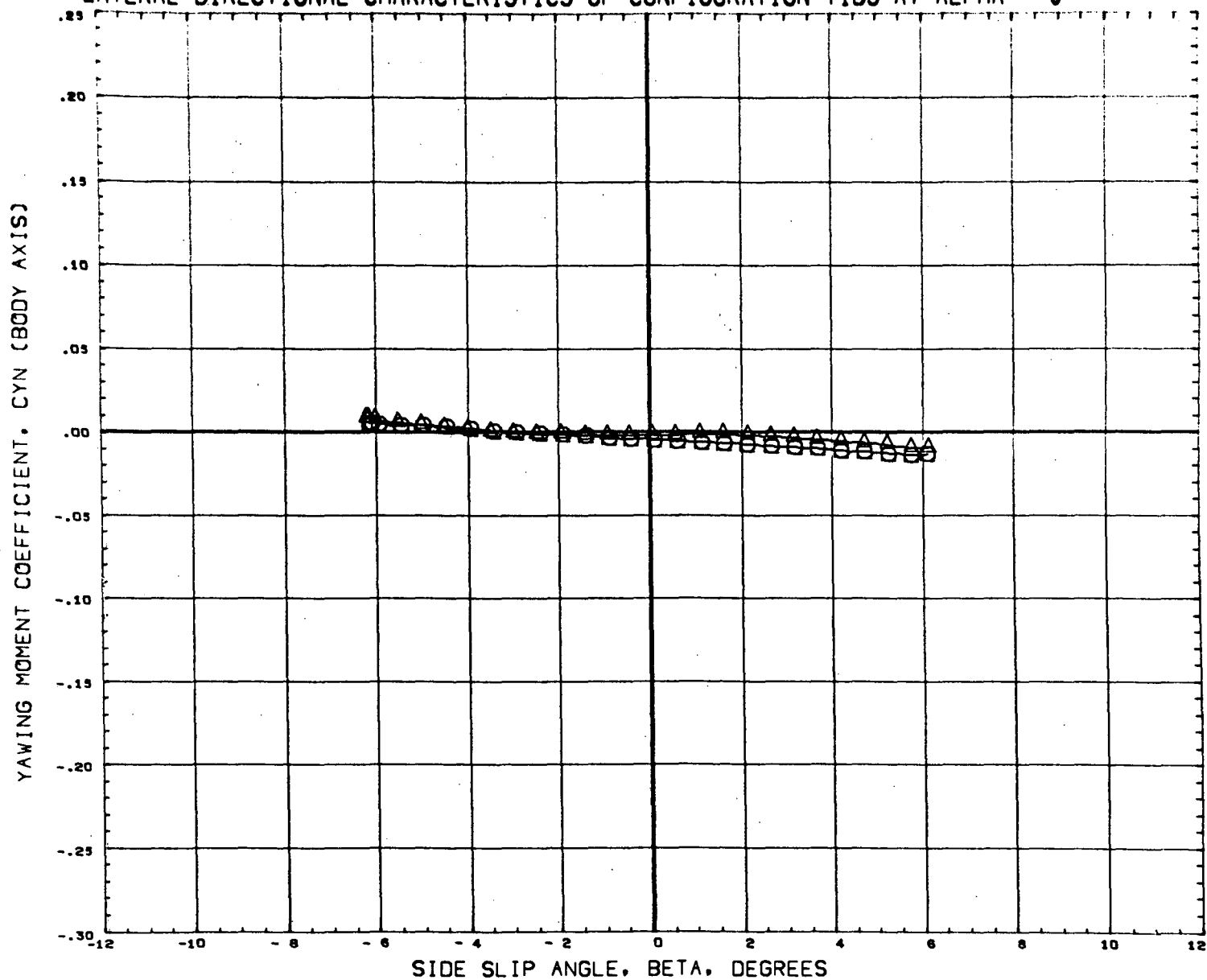
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MDAC S-222 COMPOSITE(T-CG) T1B5

(RD7569) 17 MAR 72 PAGE 502



# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T1B5 AT ALPHA = 0



SYMBOL MACH PARAMETRIC VALUES

○  
△

1.507  
2.203

ALPHA

0.000

## REFERENCE INFORMATION

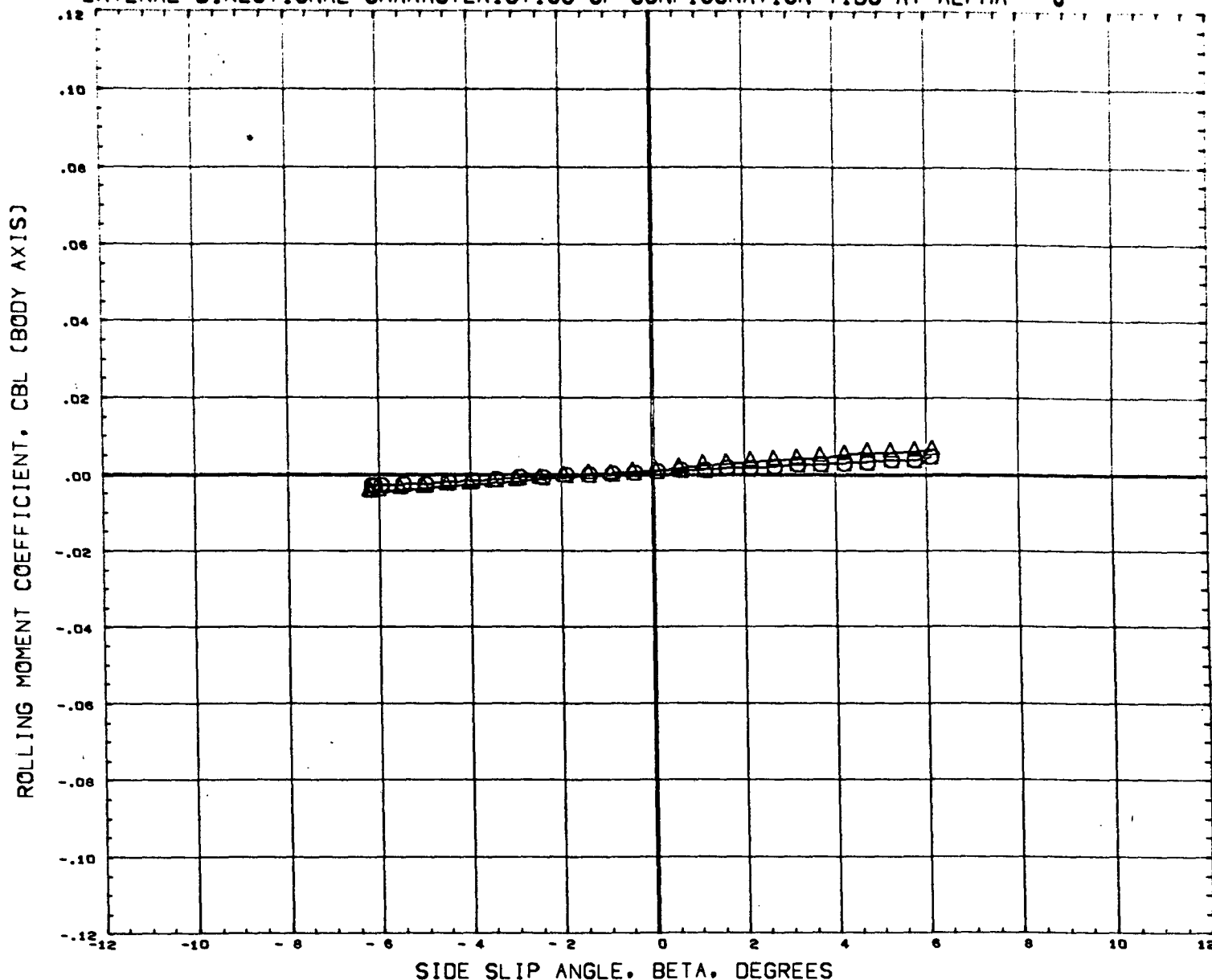
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ZMRP	200.0004	IN.
SCALE	0.0060	

REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T1B5

(RD7569) 17 MAR 72 PAGE 503

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T1B5 AT ALPHA = 0



SYMBOL MACH ALPHA PARAMETRIC VALUES  
 O 1.507  
 Δ 2.203

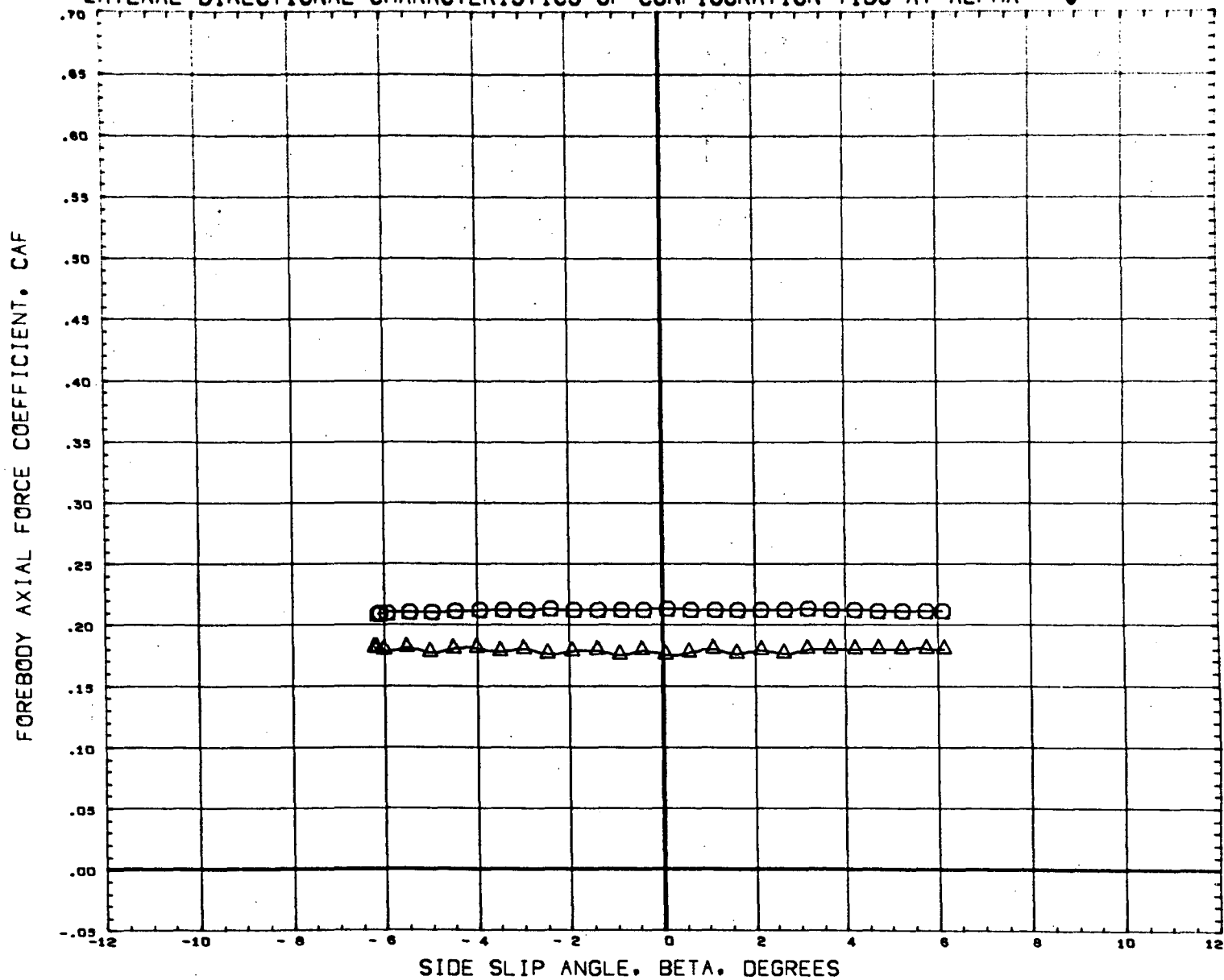
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 ZMRP 200.0004 IN.  
 SCALE 0.0060

REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T1B5

(RD7569) 17 MAR 72 PAGE 504

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T1B5 AT ALPHA = 0



SYMBOL MACH ALPHA PARAMETRIC VALUES  
 O 1.307  
 Δ 2.203

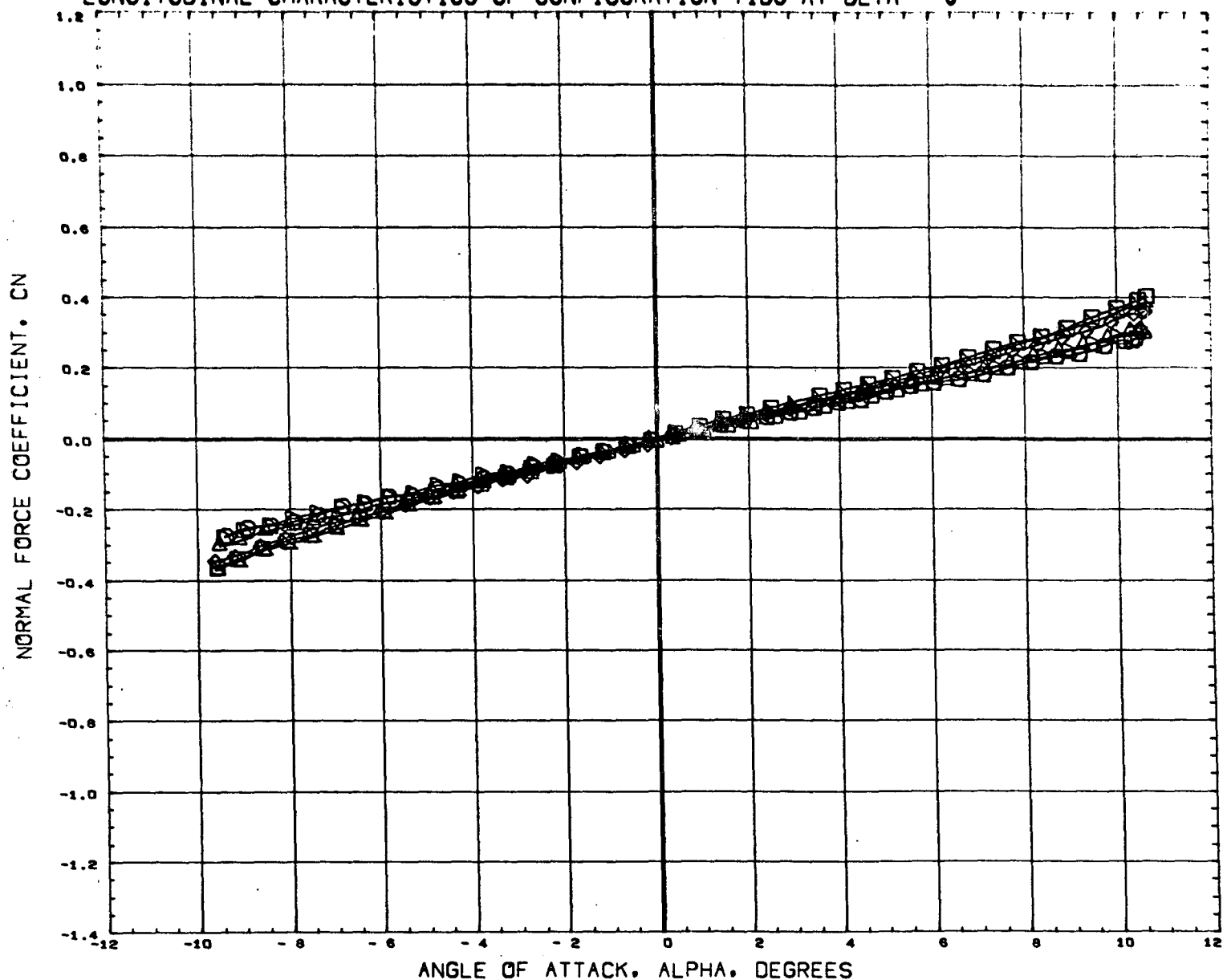
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 ZMRP 200.0004 IN.  
 SCALE 0.0060

REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T1B5

(RD7569) 17 MAR 72 PAGE 505

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0



SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.585	0.000	
△	0.897		
◇	1.094		
□	1.507		
▽	2.203		
◇	4.469		
		DATA HIST. CODE	*GTV

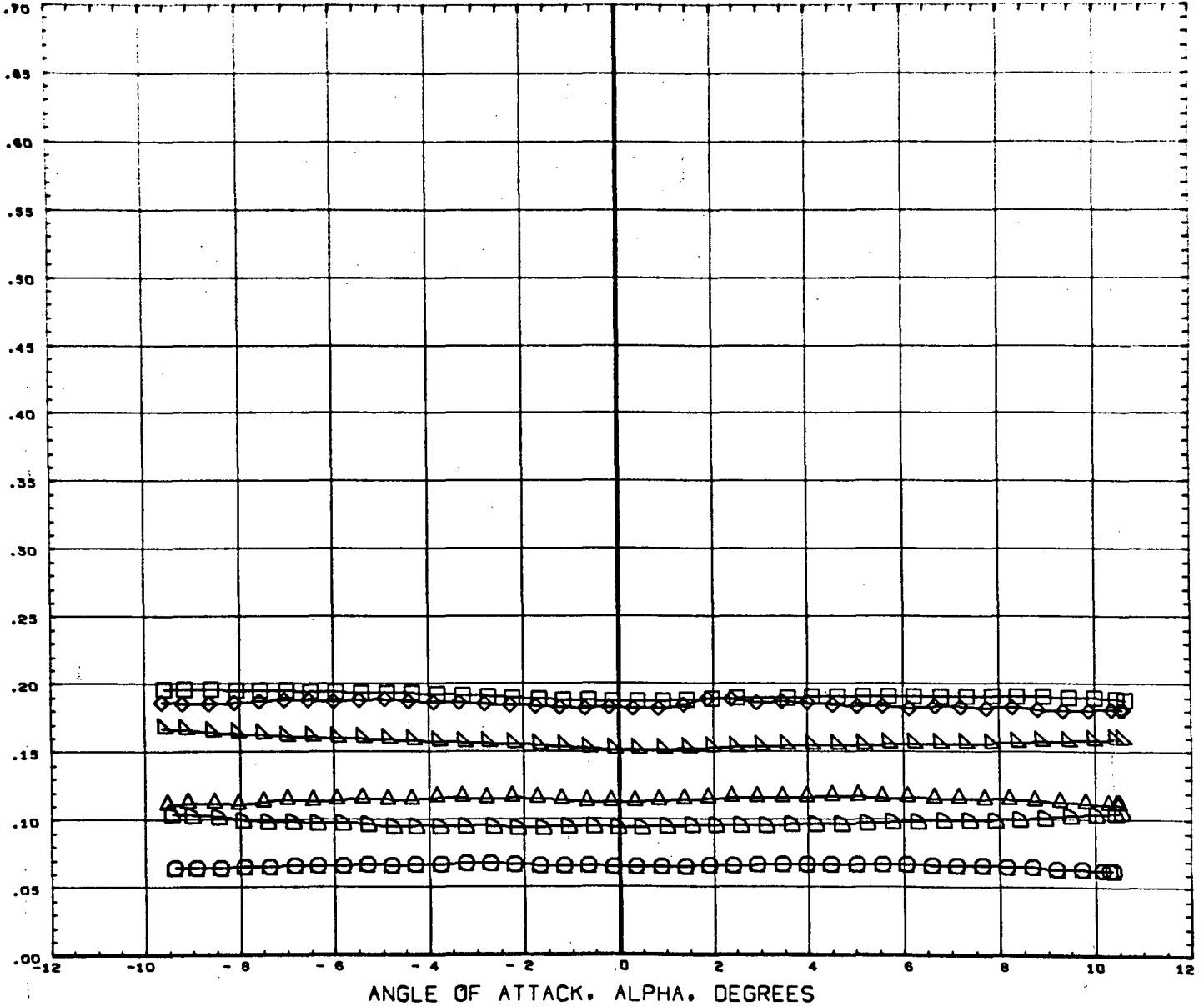
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YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(CD7570) 12 SEP 72 PAGE 506

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0

AXIAL FORCE COEFFICIENT, CA



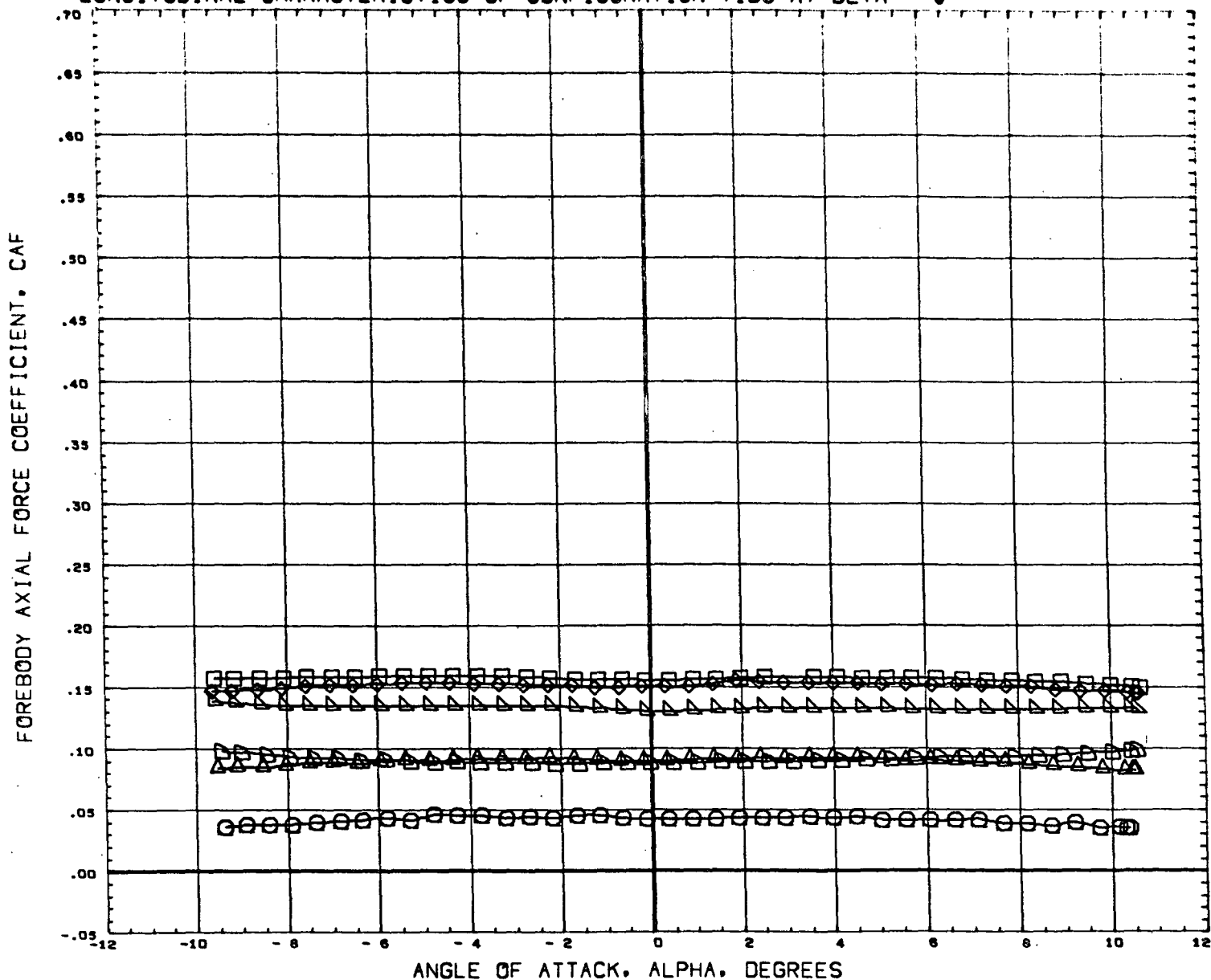
SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.585		0.000
◇	0.897		
□	1.094		
△	1.507		
▽	2.203		
●	4.469	DATA HIST. CODE	*GTV

REFERENCE INFORMATION		
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XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(CD7570) 12 SEP 72 PAGE 507

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0



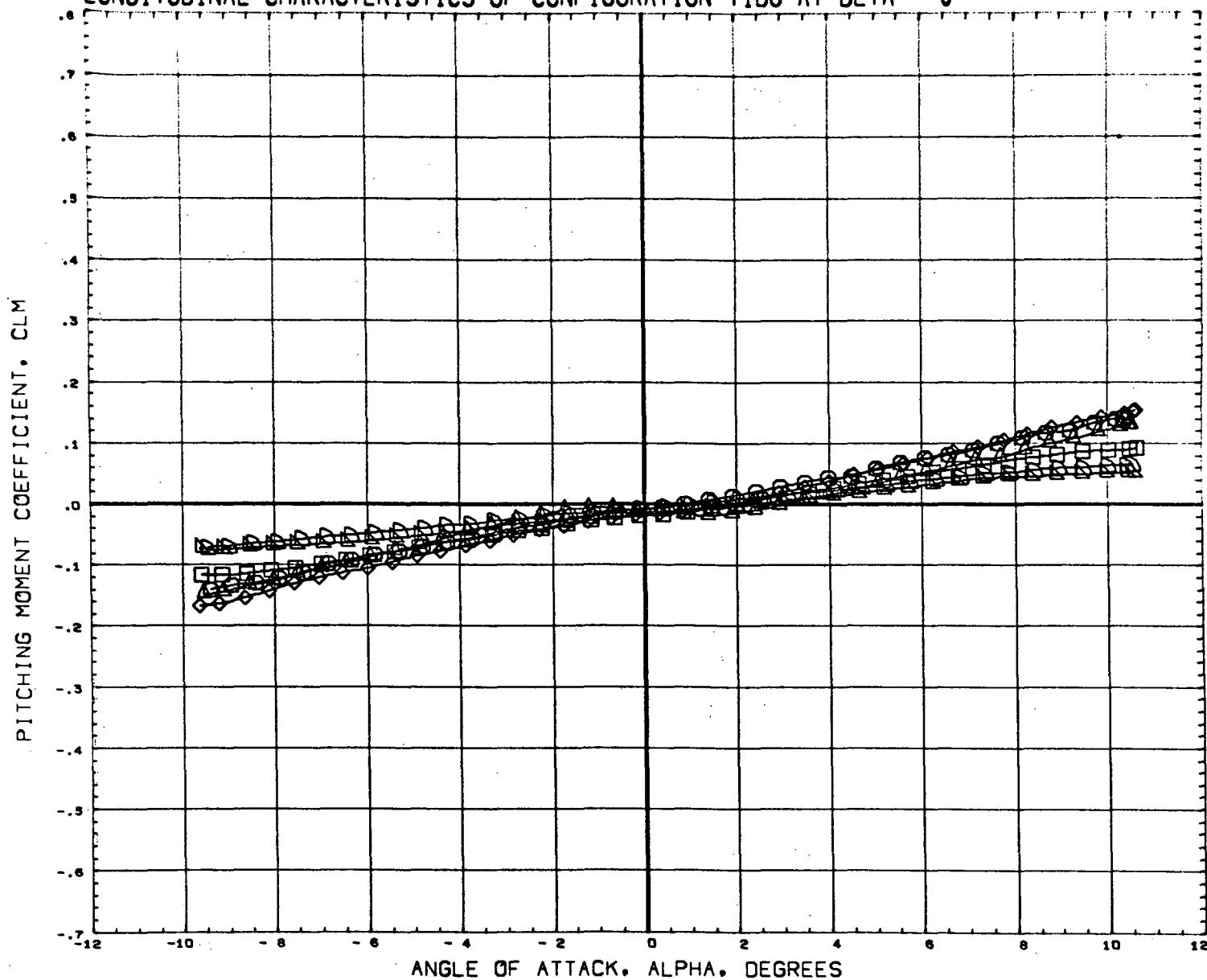
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△	0.897		
◇	1.094		
◻	1.307		
◼	2.203		
◻	4.469	DATA HIST. CODE	*GTV

REFERENCE INFORMATION		
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YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(CD7570) 12 SEP 72 PAGE 508

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0



SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.585	0.000	
◇	0.897		
◇	1.094		
◇	1.507		
◇	2.203		
◇	4.469		
		DATA HIST. CODE	*GTV

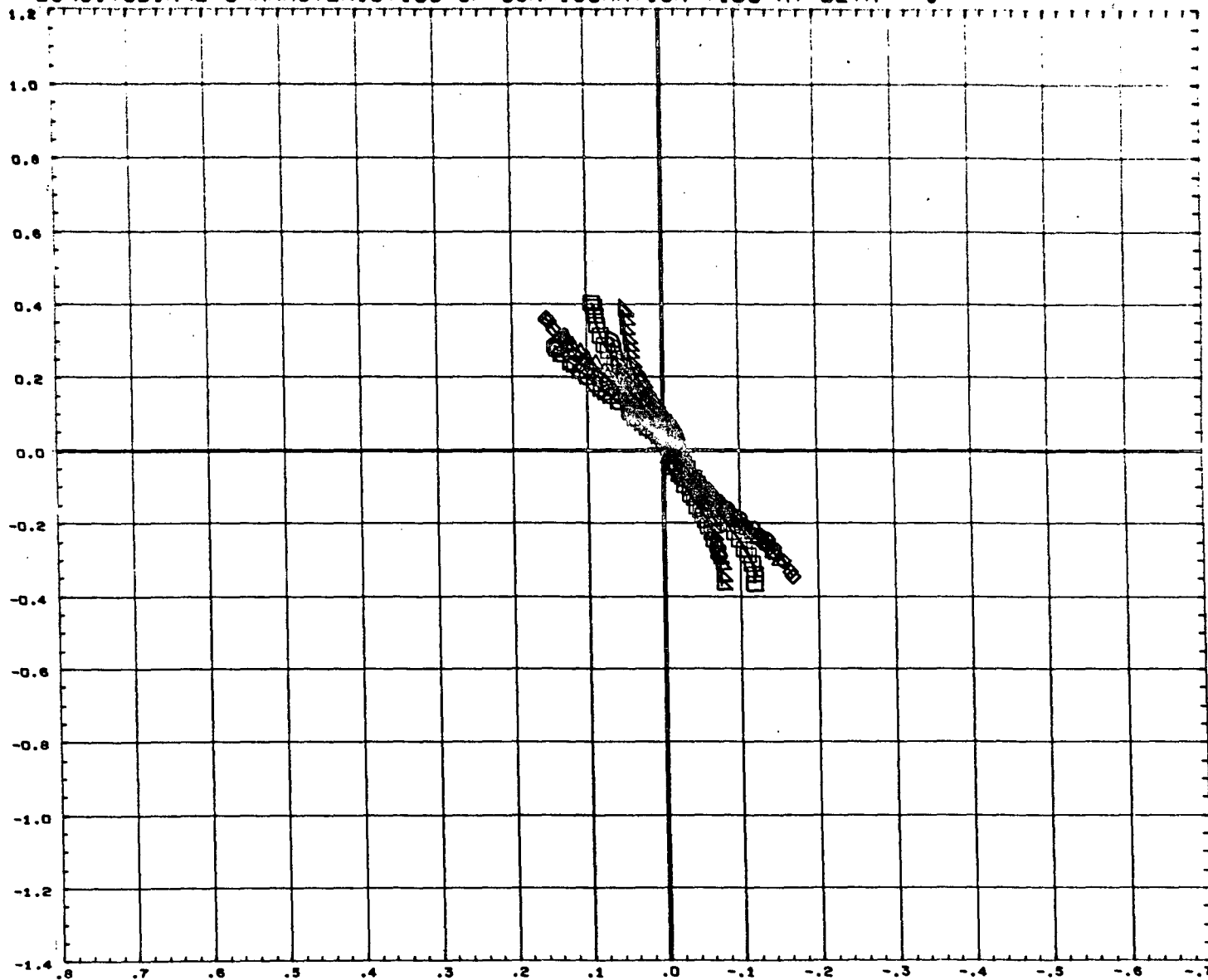
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(C07570) 12 SEP 72 PAGE 509

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0

NORMAL FORCE COEFFICIENT, CN



PITCHING MOMENT COEFFICIENT, CLM

SYMBOL	MACH	BETA	PARAMETRIC VALUES
◇	0.585	0.000	
◇	0.897		
◇	1.094		
◇	1.507		
◇	2.203		
◇	4.469		
		DATA HIST. CODE	*GTV

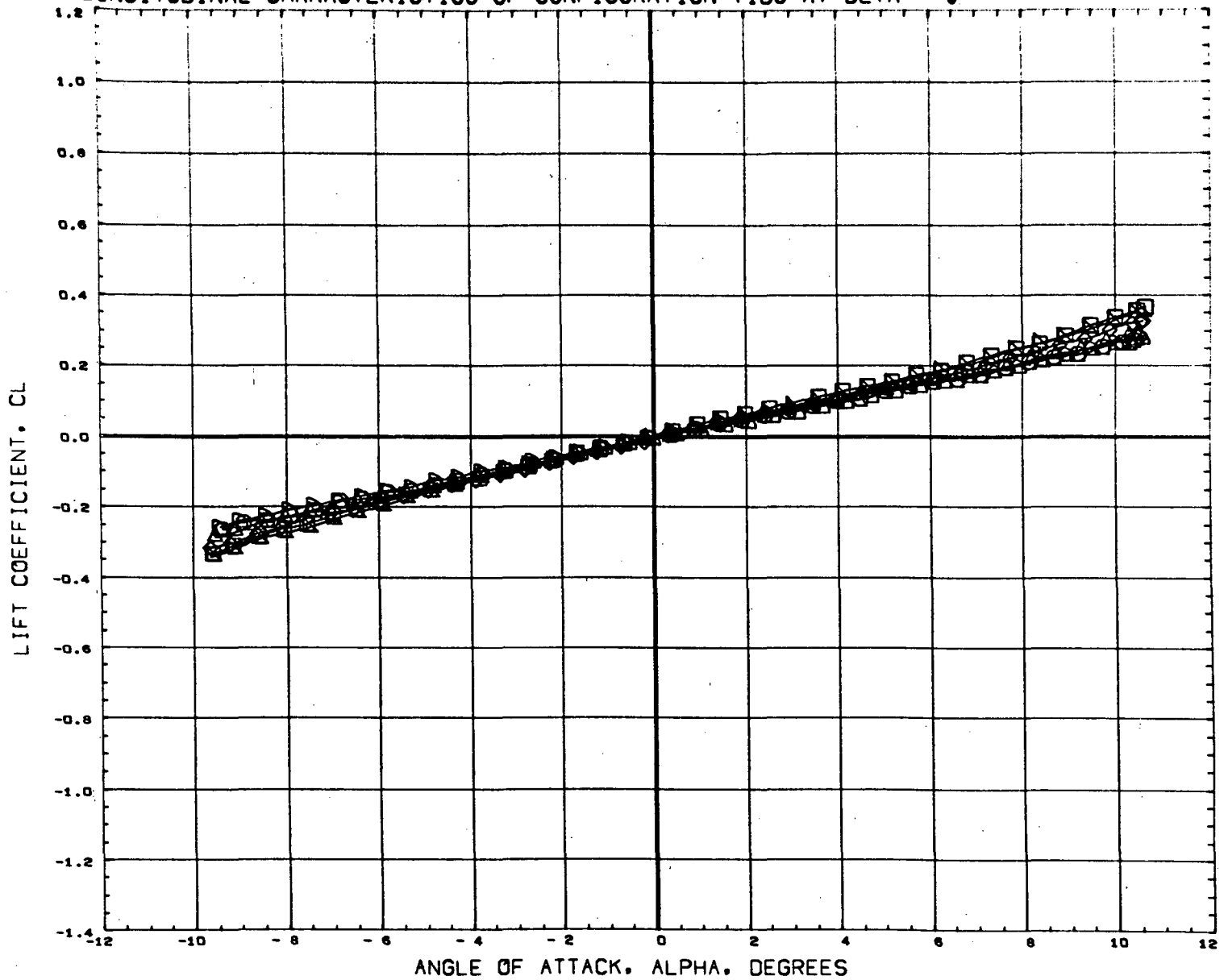
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(CD7570) 12 SEP 72 PAGE 510



# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T186 AT BETA = 0



SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.585	0.000	
◇	0.897		
□	1.094		
△	1.507		
▽	2.203		
◻	4.469		
		DATA HIST. CODE	*CTV

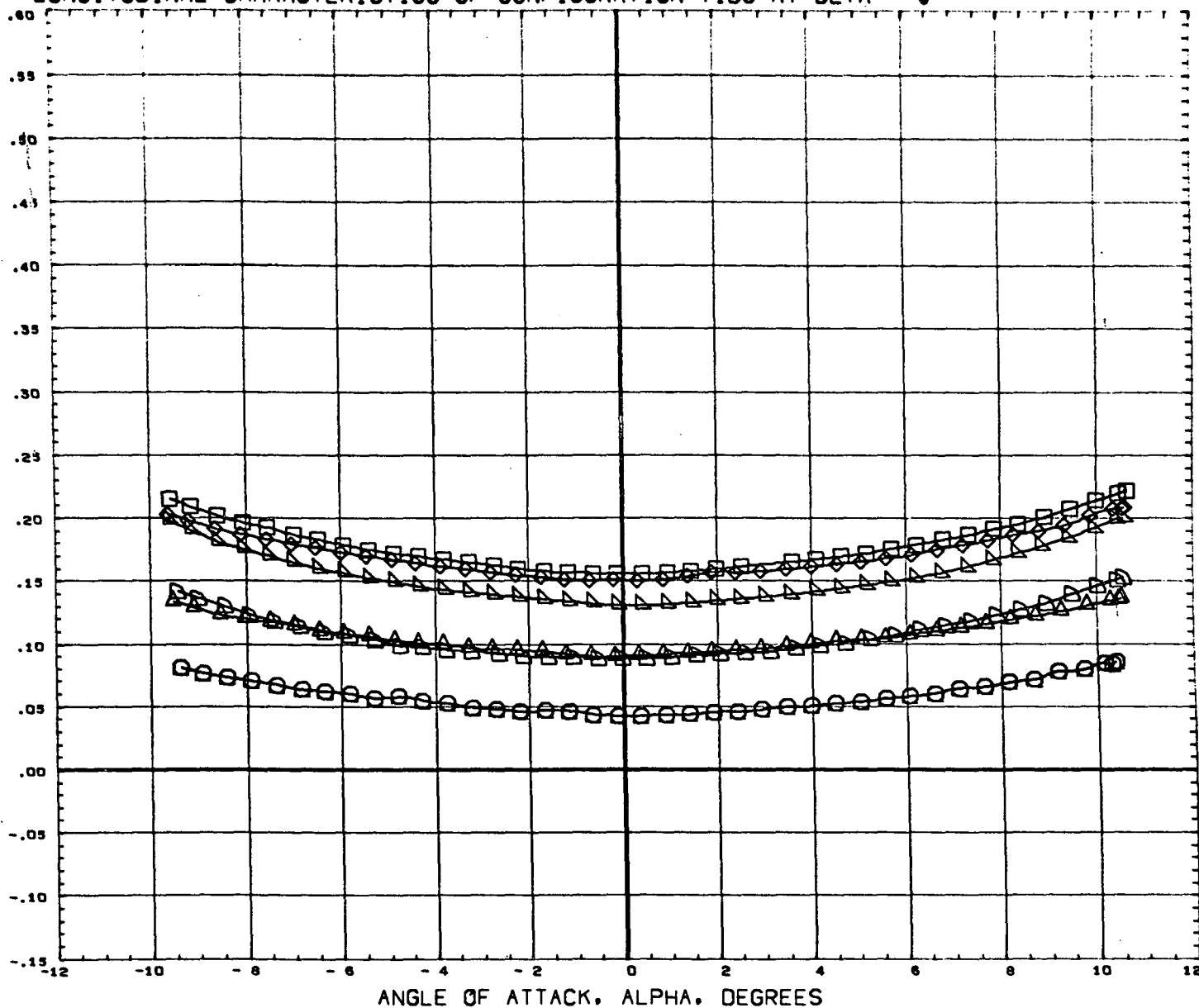
REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	682.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T186

(CD7570) 12 SEP 72 PAGE 511

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



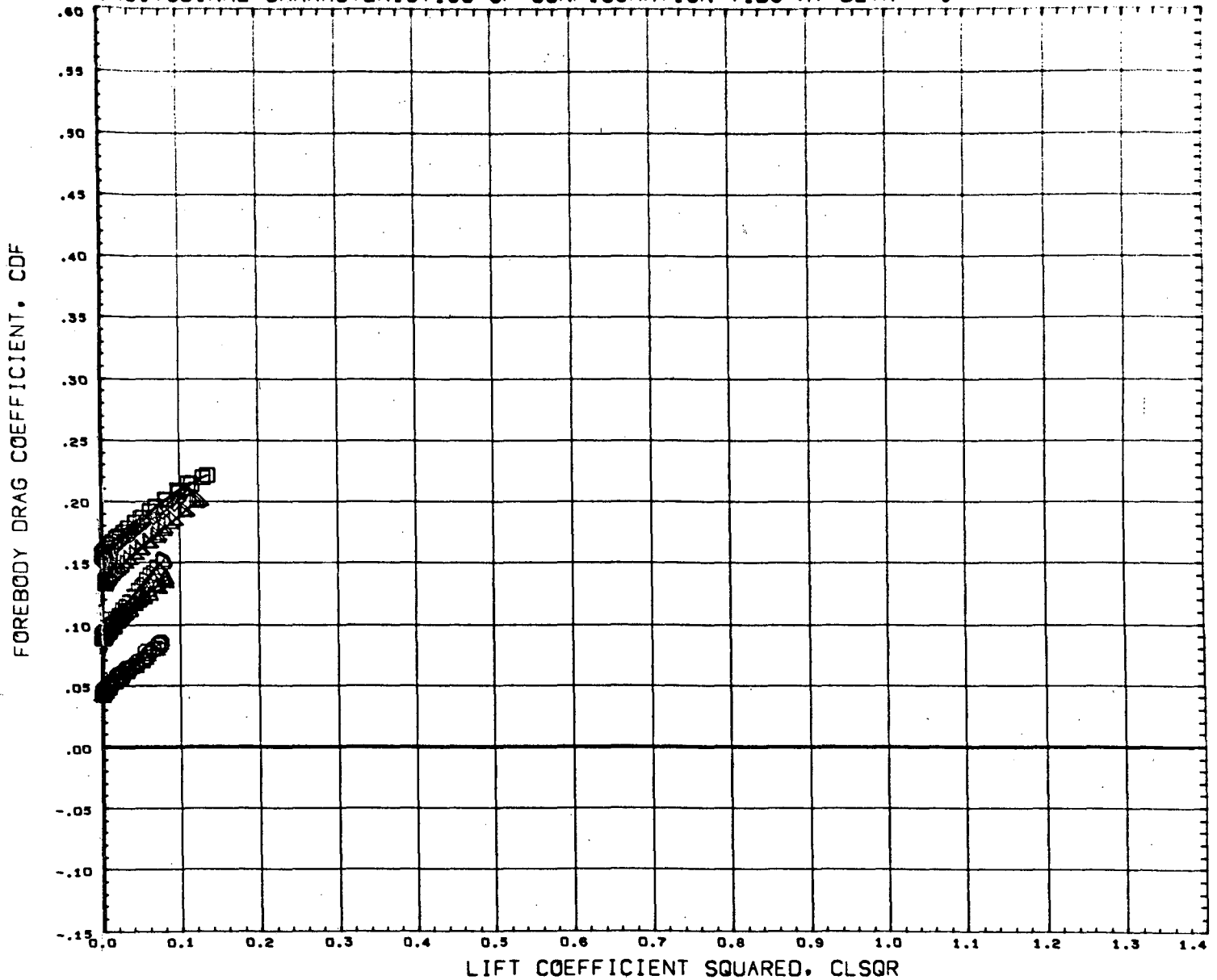
SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.585	0.000	
△	0.897		
◇	1.094		
□	1.507		
▤	2.203		
◻	4.469		
		DATA HIST. CODE	*GTV

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(CD7570) 12 SEP 72 PAGE 512

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0



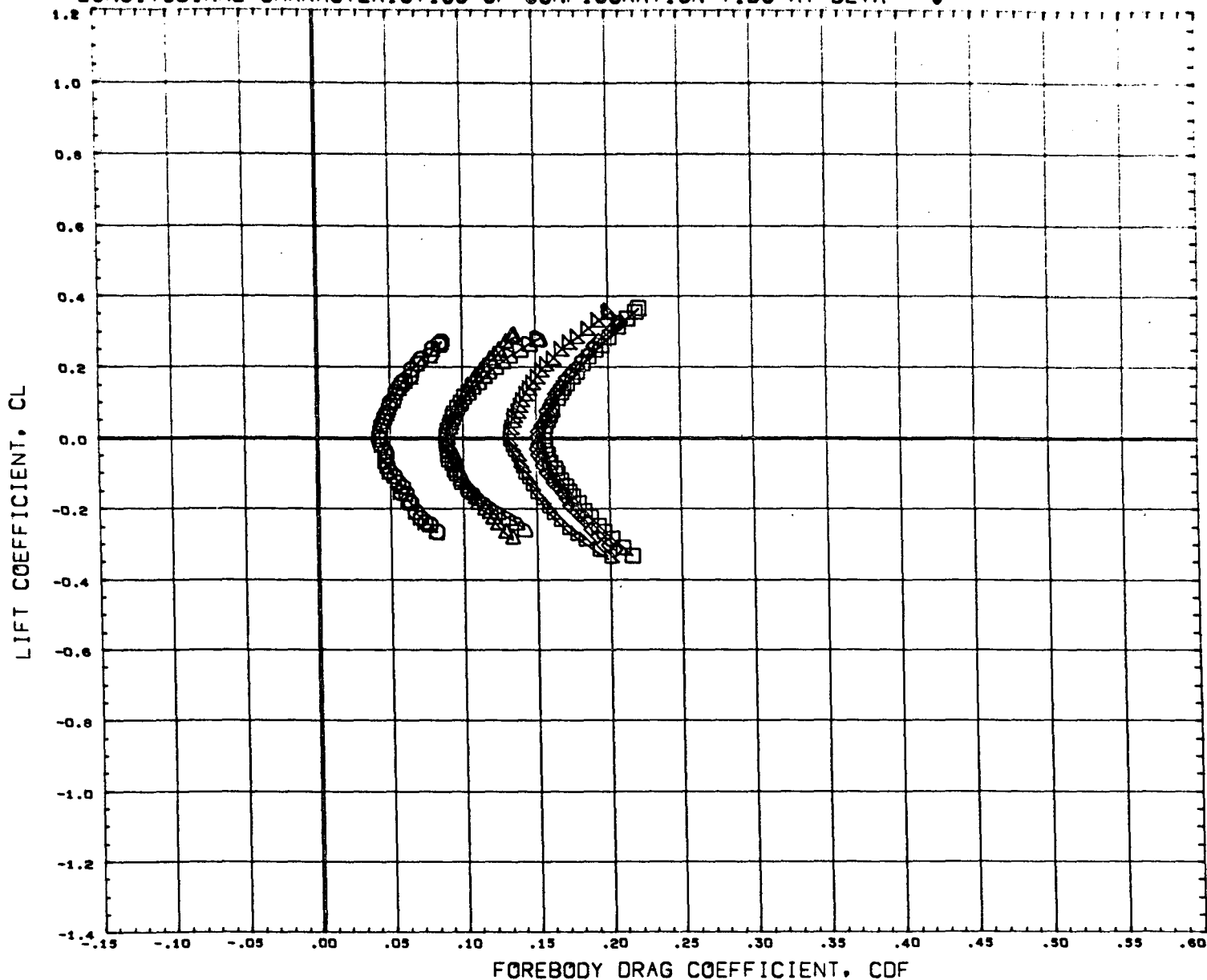
SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.585	0.000	
◇	0.897		
◇	1.094		
◇	1.507		
◇	2.203		
◇	4.469		
		DATA HIST. CODE	*GTV

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(CD7570) 12 SEP 72 PAGE 513

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0



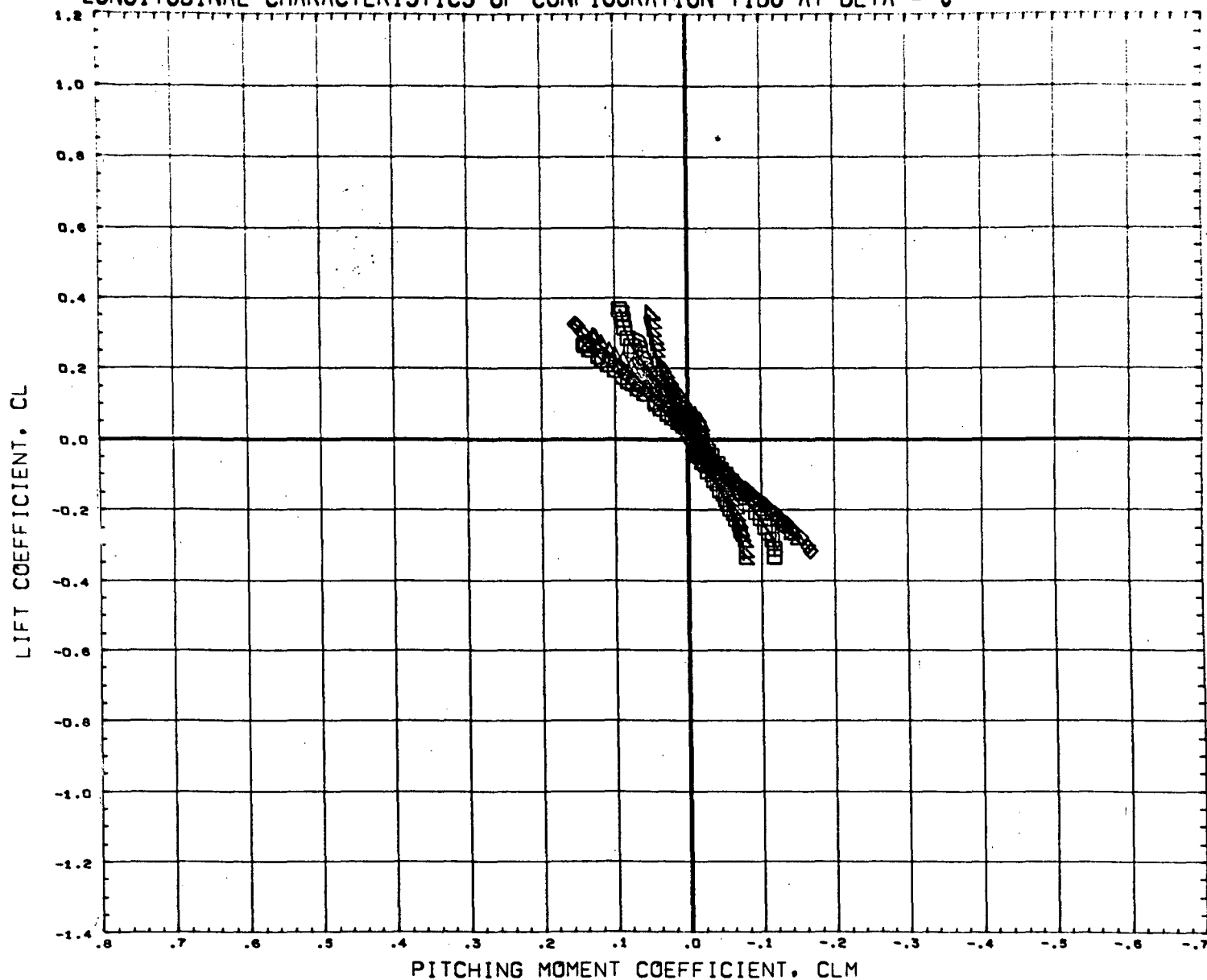
SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.585	0.000	
◻	0.897		
△	1.094		
◻	1.507		
◻	2.203		
◻	4.469		
		DATA HIST. CODE	*GTV

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	809.3004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T1B6 AT BETA = 0

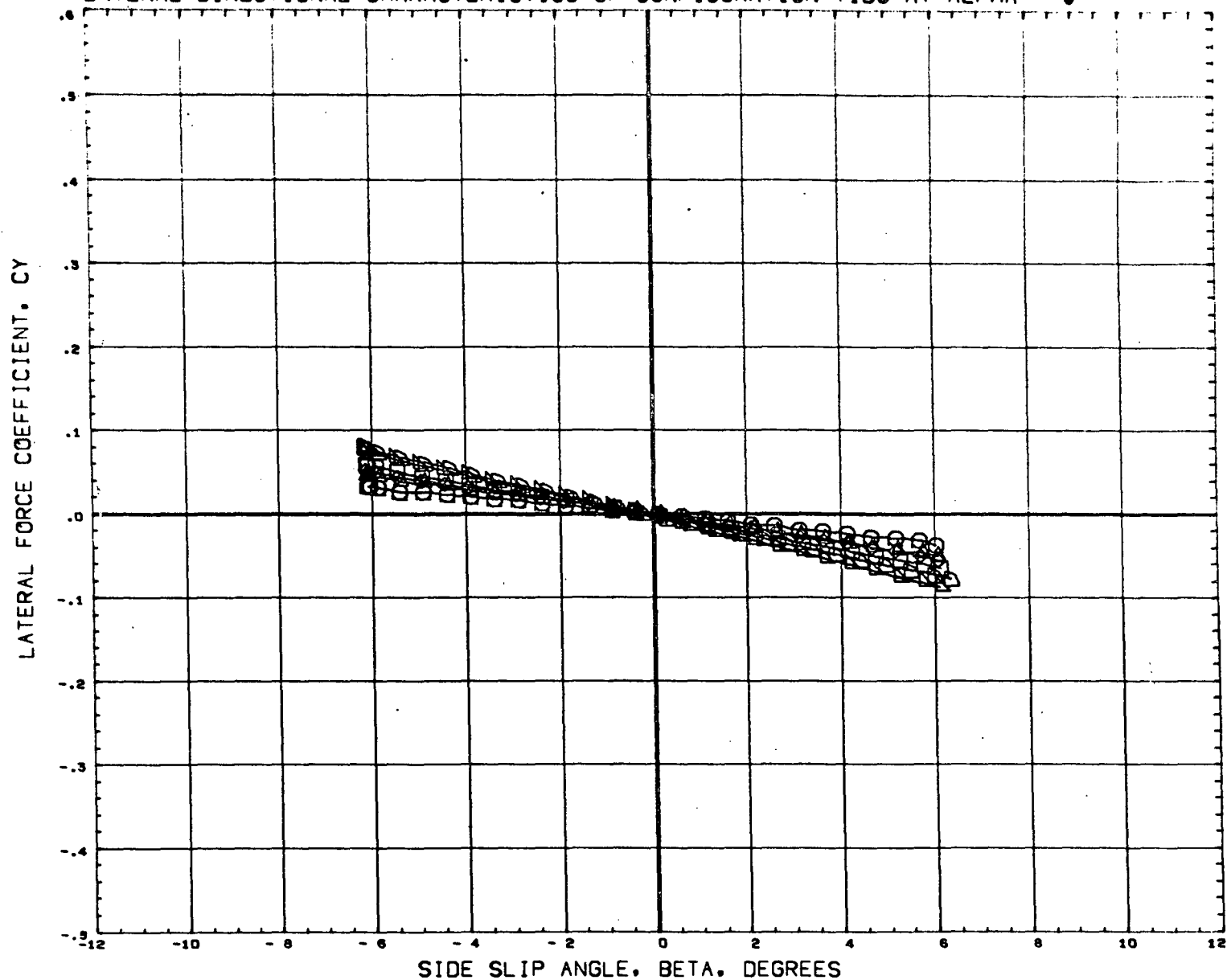


SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.585	0.000	
◇	0.897		
△	1.094		
□	1.507		
▽	2.203		
◇	4.469		

DATA HIST. CODE \*GTV

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T1B6 AT ALPHA = 0



SYMBOL	MACH	PARAMETRIC VALUES
○	0.589	ALPHA 0.000
◇	0.893	
△	1.093	
◊	1.507	
◻	2.203	
◼	4.469	REFERENCE FILE

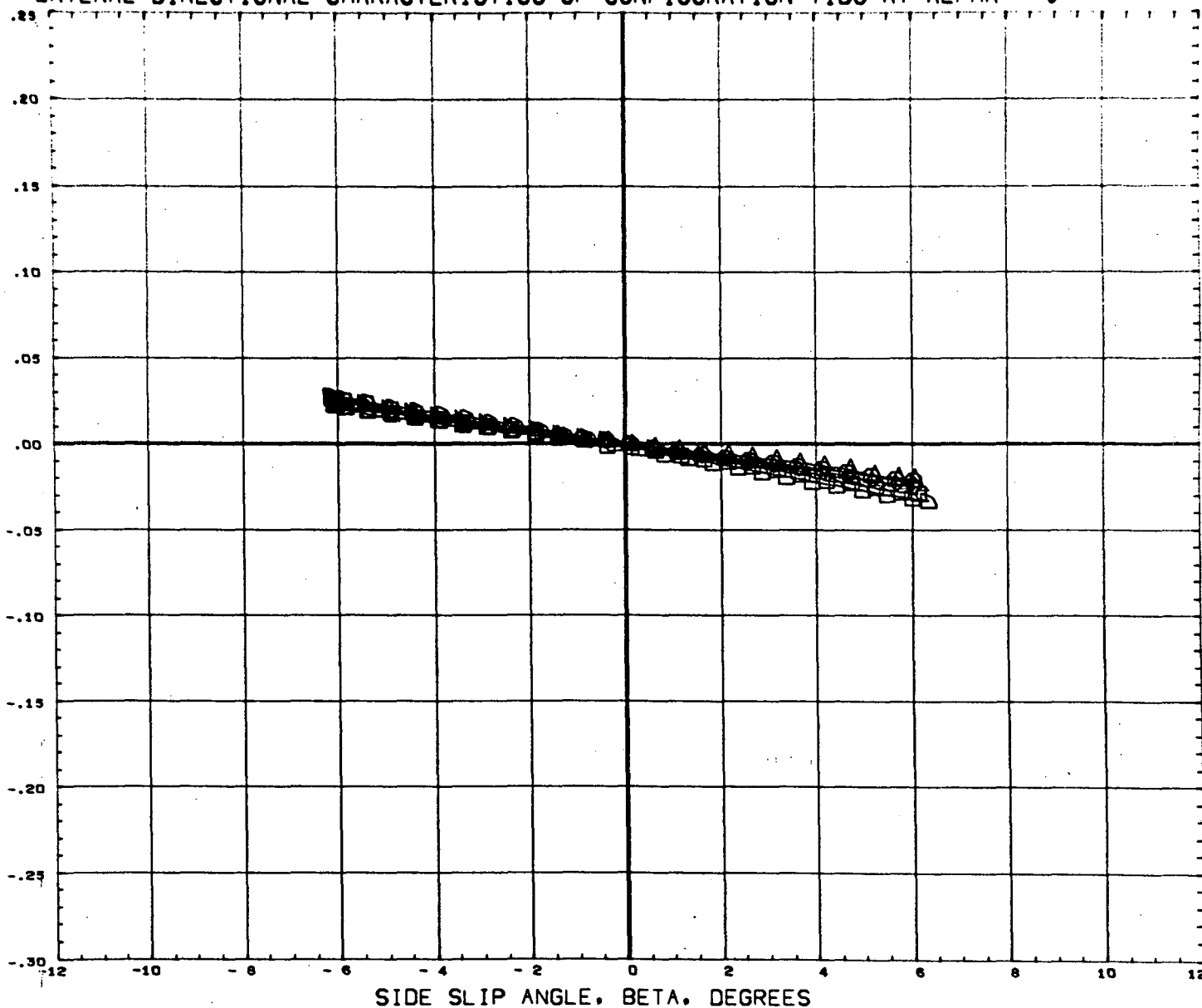
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BREF	882.0004	IN.
XMRP	537.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(RD7571) 17 MAR 72 PAGE 516

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T1B6 AT ALPHA = 0

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)



SYMBOL	MACH	PARAMETRIC VALUES
○	0.589	ALPHA 0.000
△	0.893	
◇	1.093	
□	1.507	
▽	2.203	
+	4.469	REFERENCE FILE

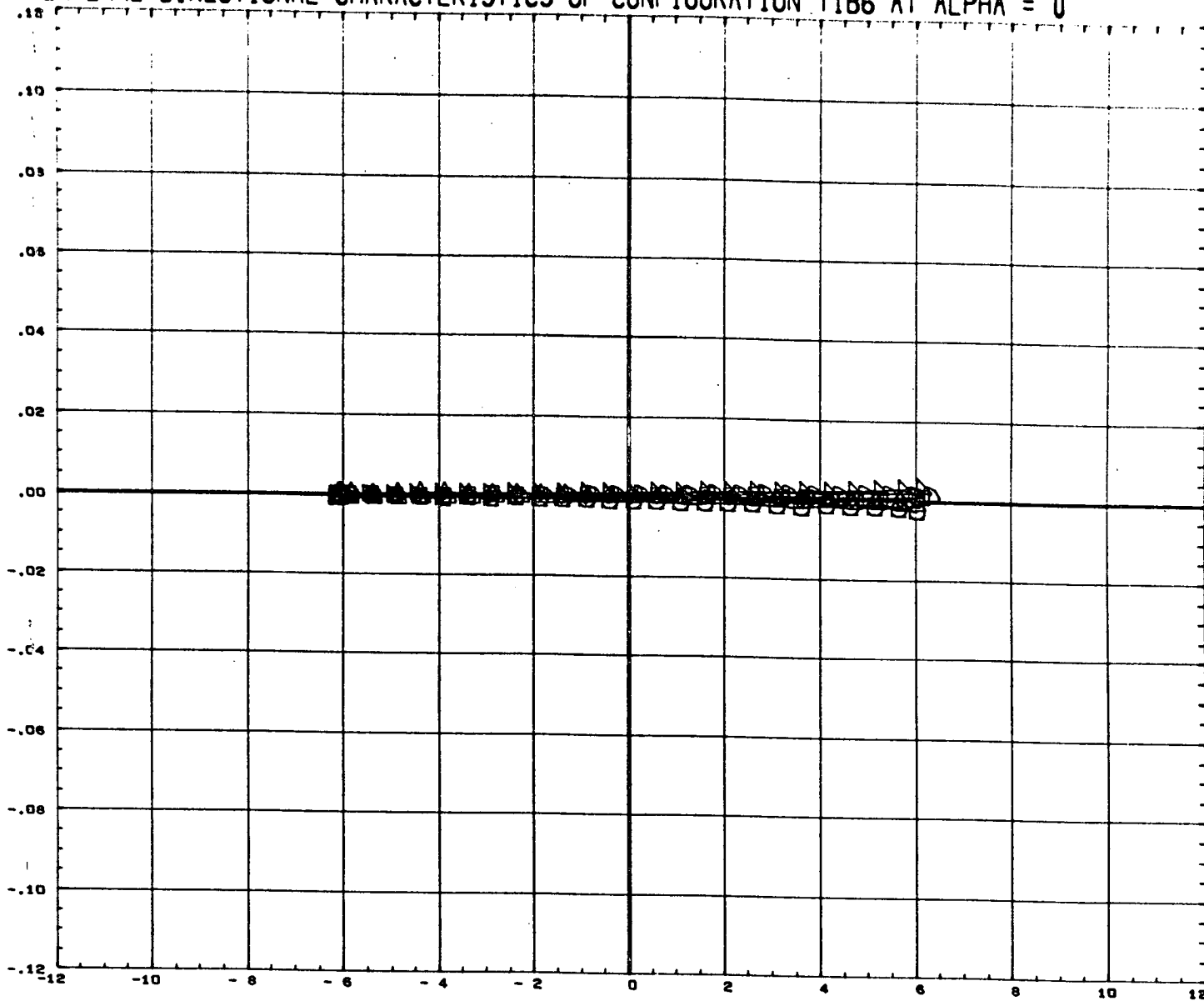
REFERENCE INFORMATION		
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BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(RD7571) 17 MAR 72 PAGE 517

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T1B6 AT ALPHA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

SYMBOL	MACH	ALPHA	PARAMETRIC VALUES
◇	0.589	0.000	
◇	0.893		
◇	1.093		
◇	1.507		
◇	2.203		
◇	4.469		
		REFERENCE FILE	

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

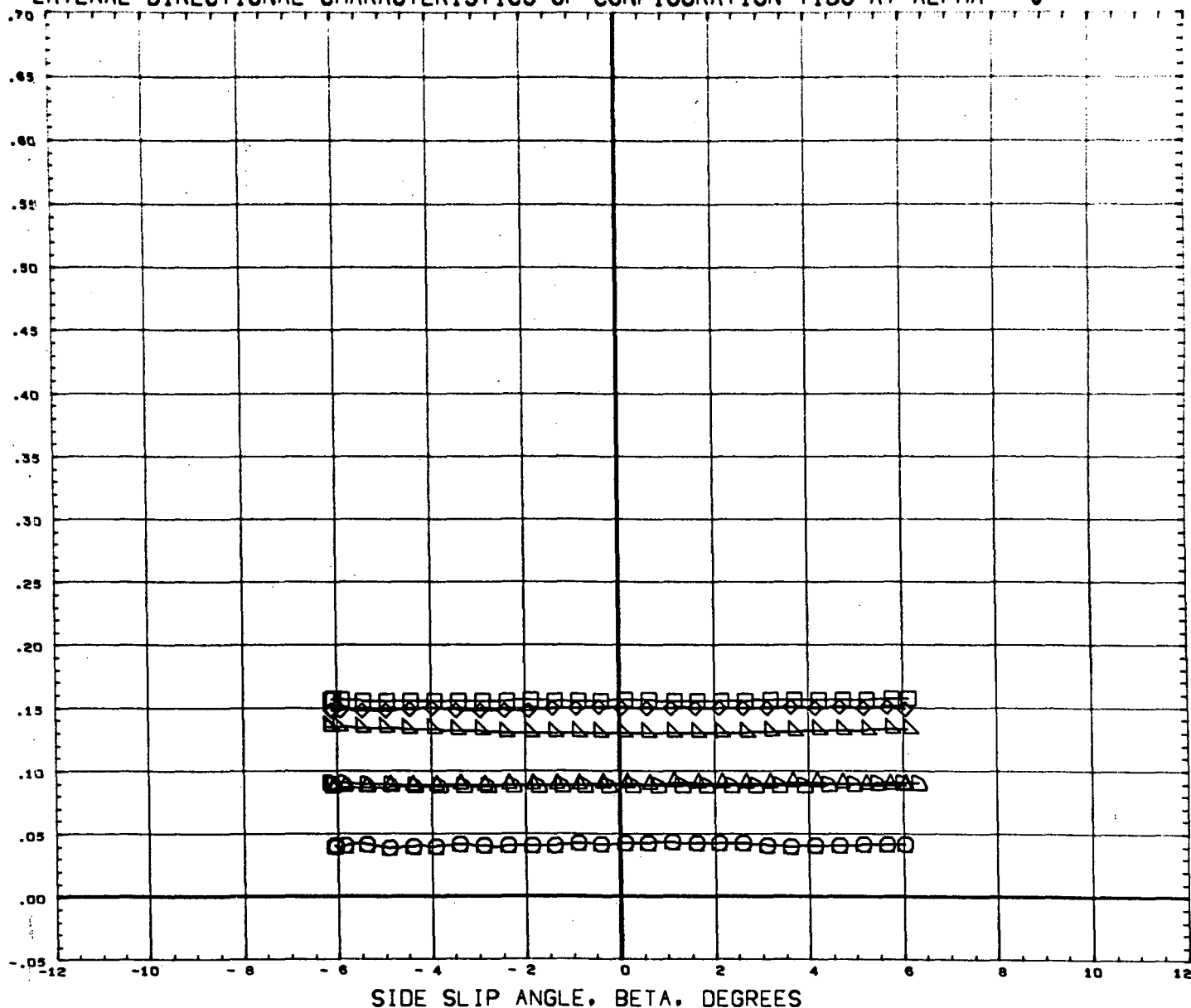
MDAC S-222 COMPOSITE(T-CG) T1B6

(RD7571) 17 MAR 72 PAGE 518



# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T1B6 AT ALPHA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



SIDE SLIP ANGLE, BETA, DEGREES

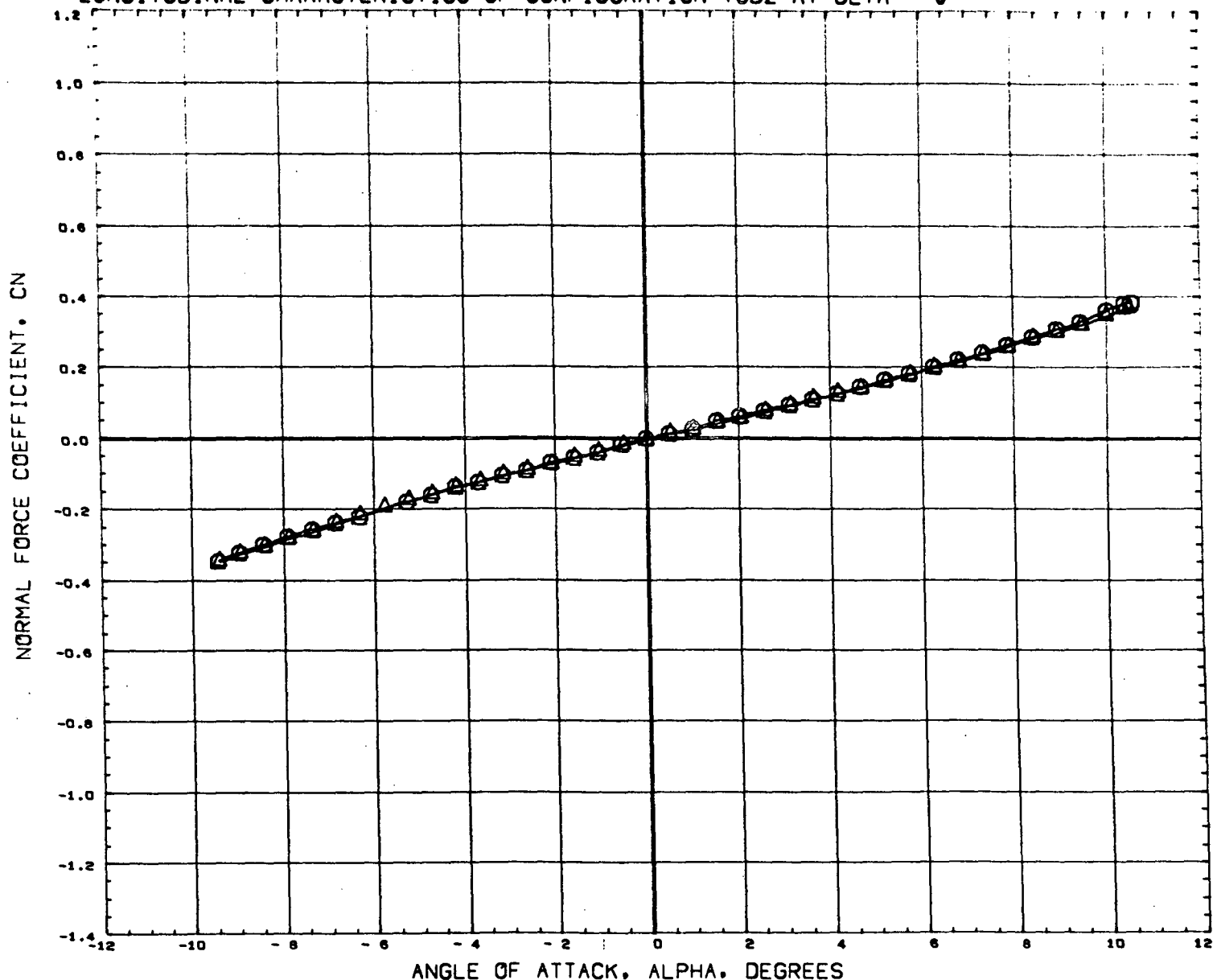
SYMBOL	MACH	PARAMETRIC VALUES
□	0.589	ALPHA 0.000
△	0.893	
◇	1.093	
○	1.307	
●	2.203	
◆	4.469	REFERENCE FILE

REFERENCE INFORMATION		
SREF	3155.3040	SO.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

MDAC S-222 COMPOSITE(T-CG) T1B6

(RD7571) 17 MAR 72 PAGE 519

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

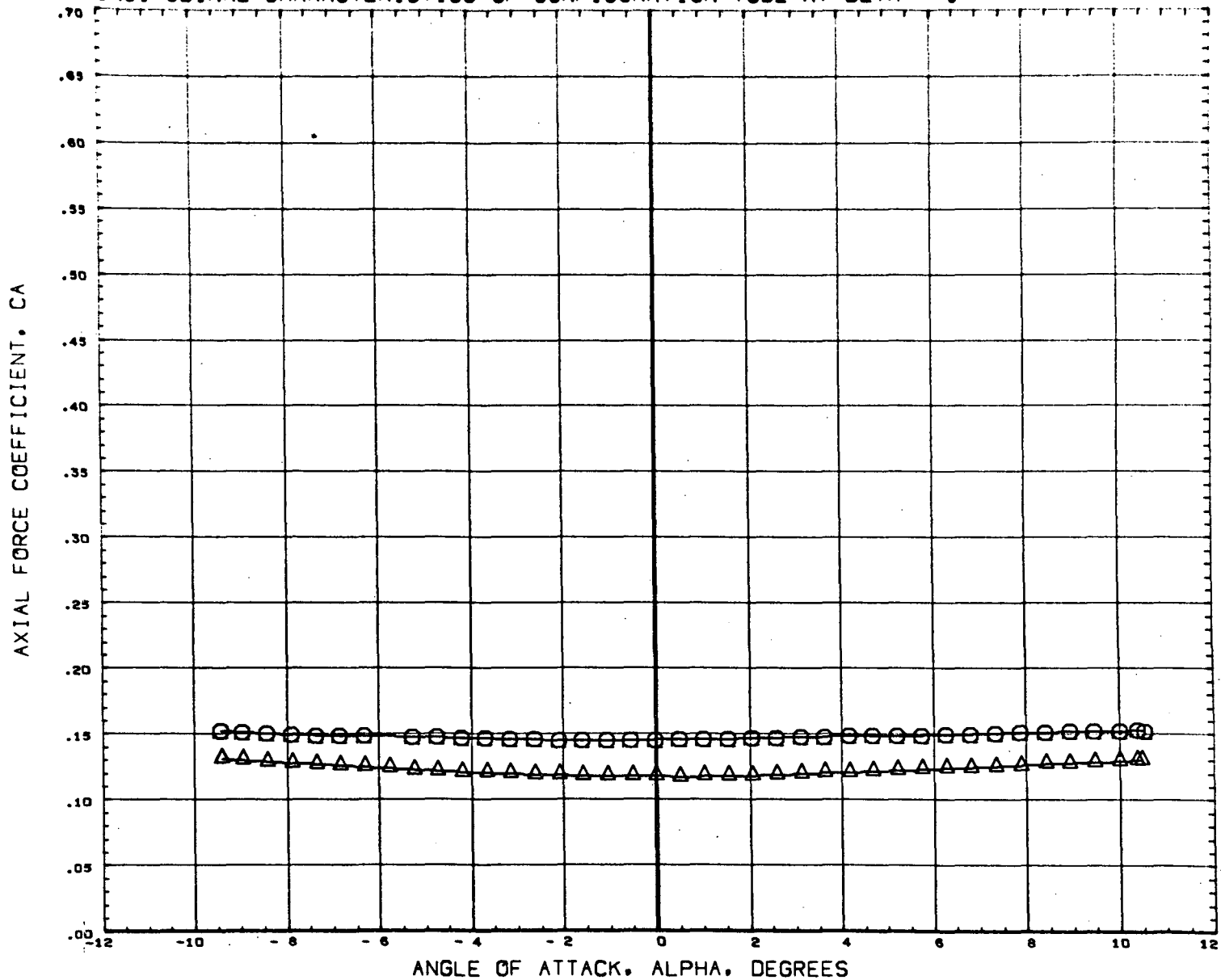
REFERENCE INFORMATION		
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BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP 72 PAGE 520

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
	1.507	BETA	0.000	AILRON	0.000
	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

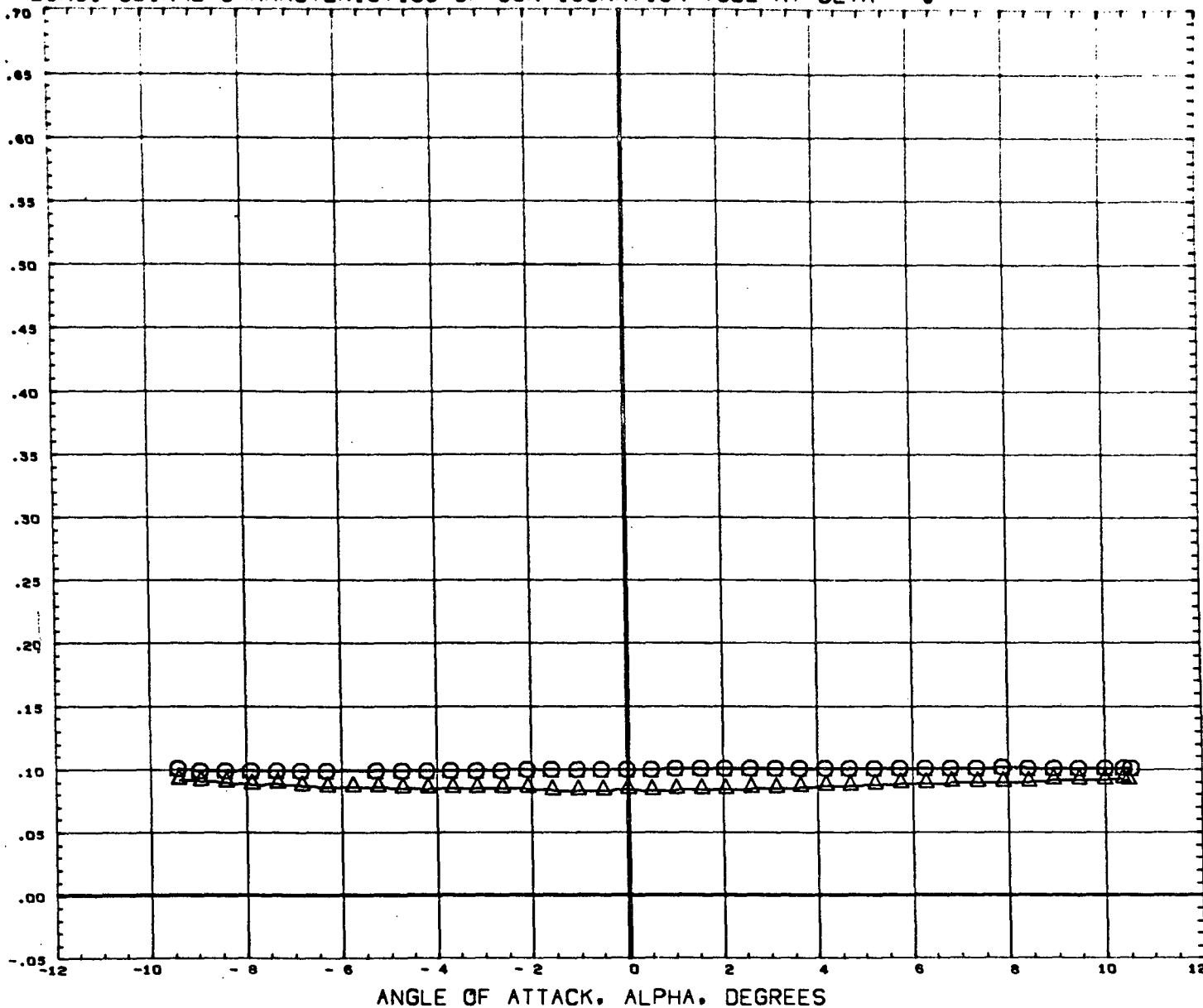
DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP 72 PAGE 521

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



ANGLE OF ATTACK, ALPHA, DEGREES

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

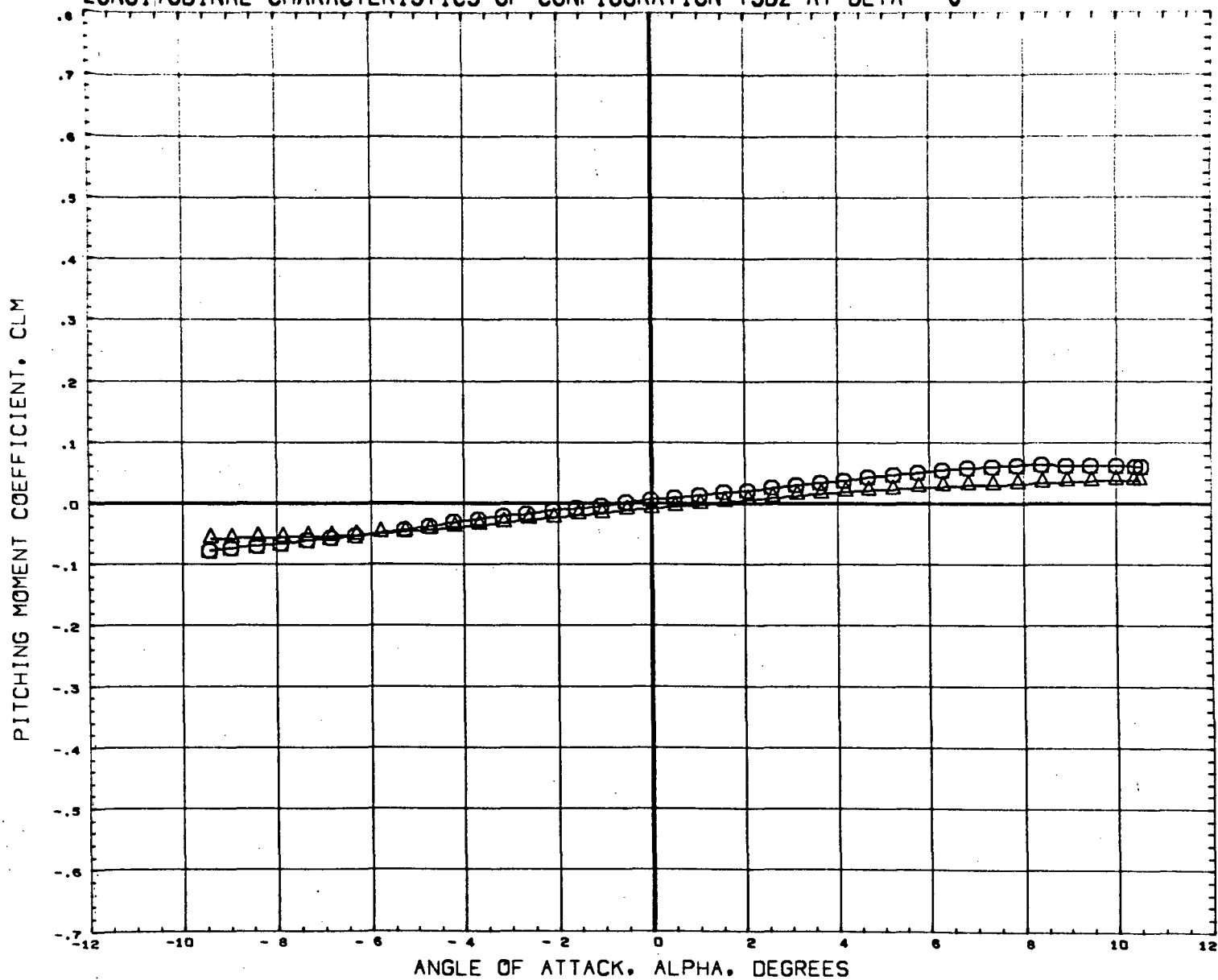
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BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP 72 PAGE 522

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

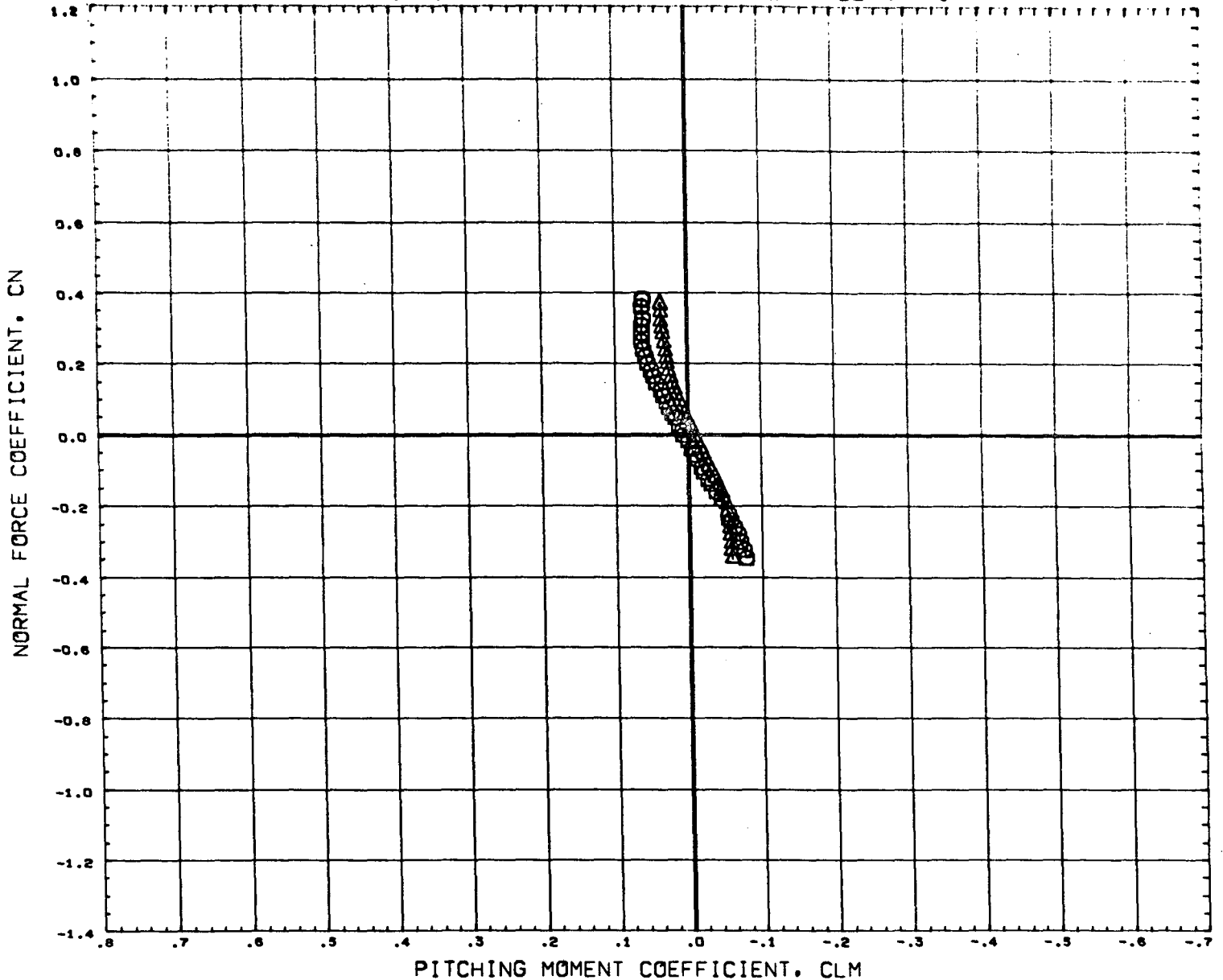
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BREF	882.0004	IN.
XM RP	557.0004	IN.
YM RP	0.0000	IN.
ZM RP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP '72 PAGE 523

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0



SYMBOL	MACH	BETA	PARAMETRIC VALUES		
○	1.507	0.000	AILRON	0.000	
△	2.203	0.000	ELEVTR	RUDDER	0.000

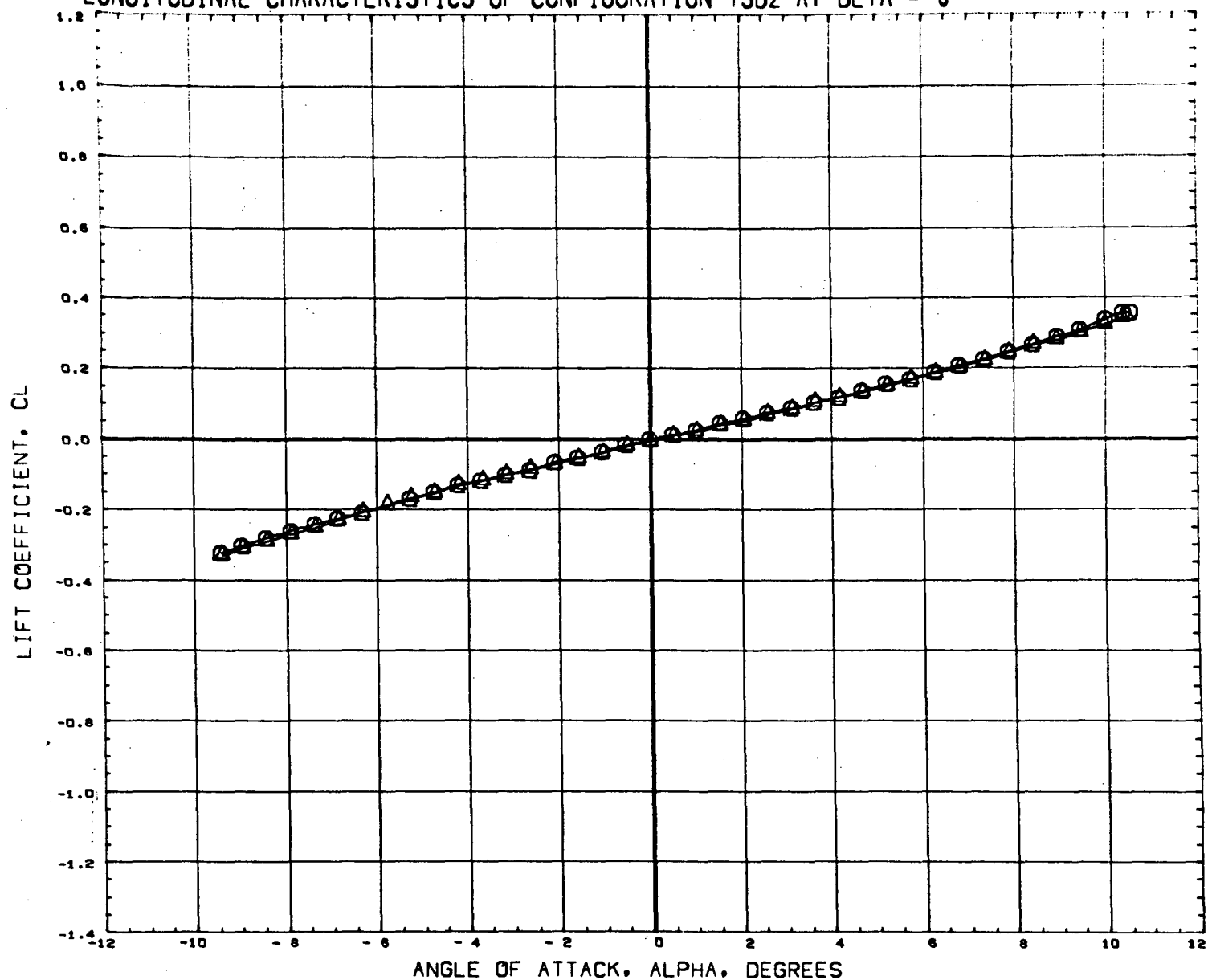
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LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(C07544) 12 SEP 72 PAGE 524

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

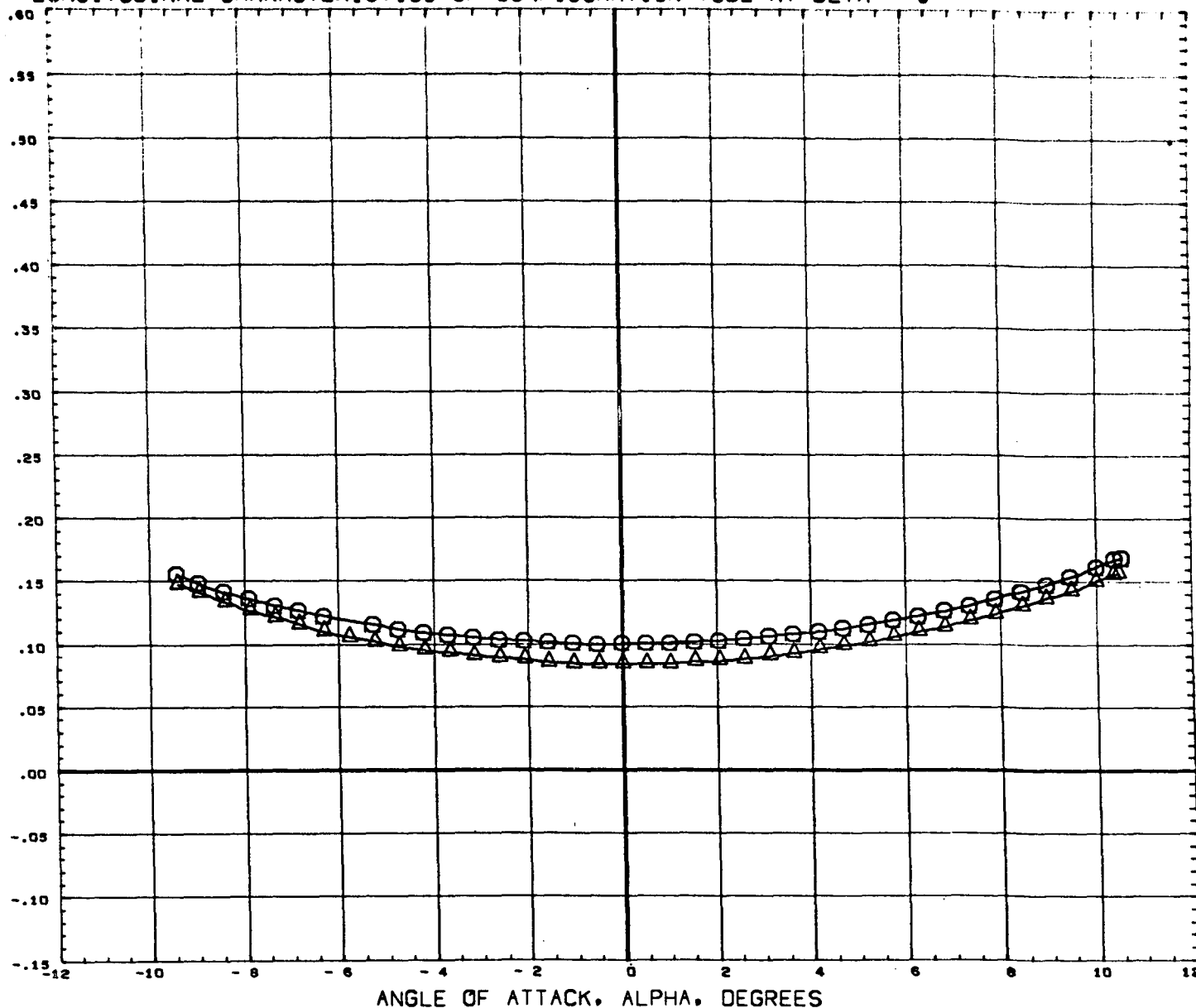
DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP 72 PAGE 525

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

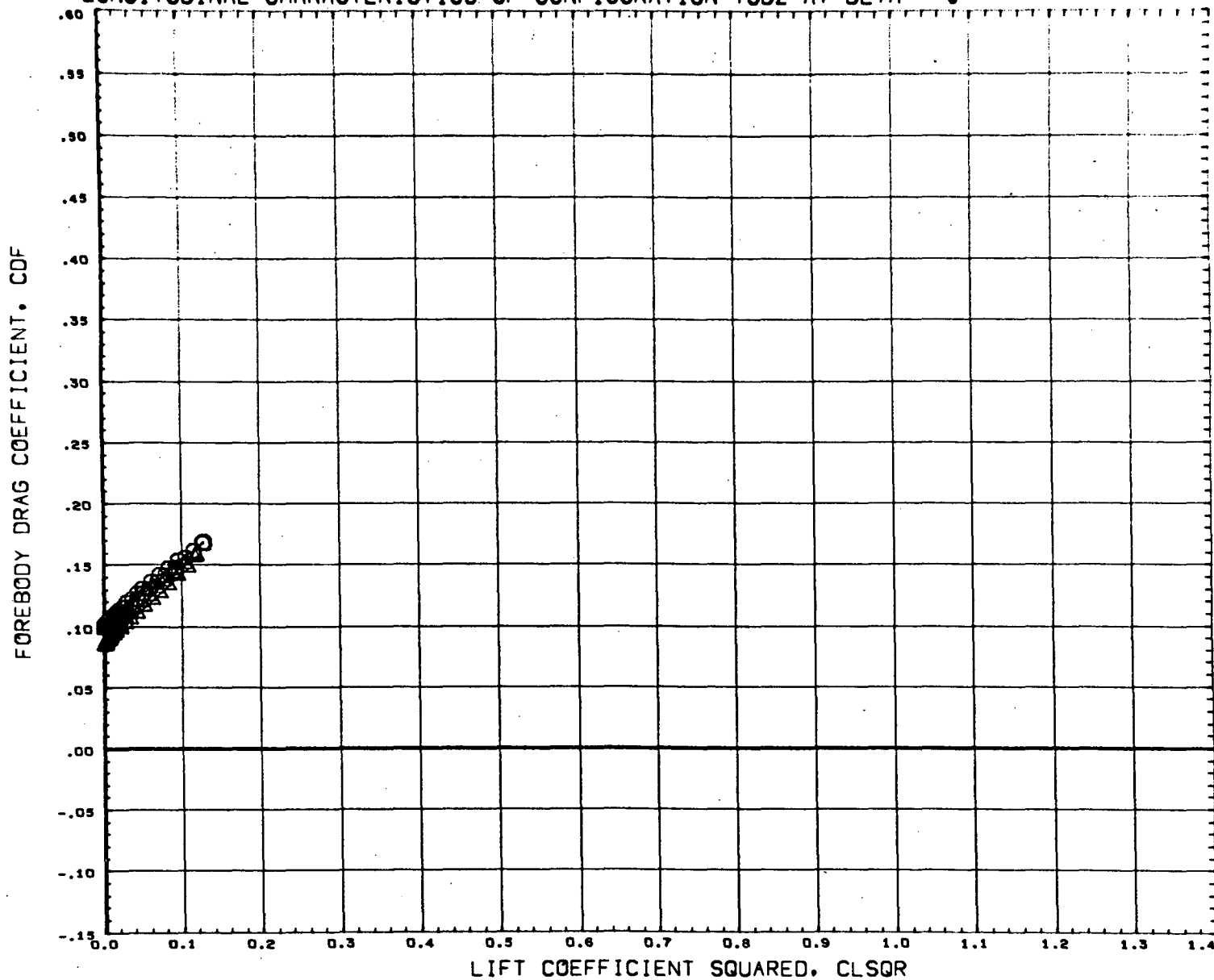
DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP 72 PAGE 526



# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

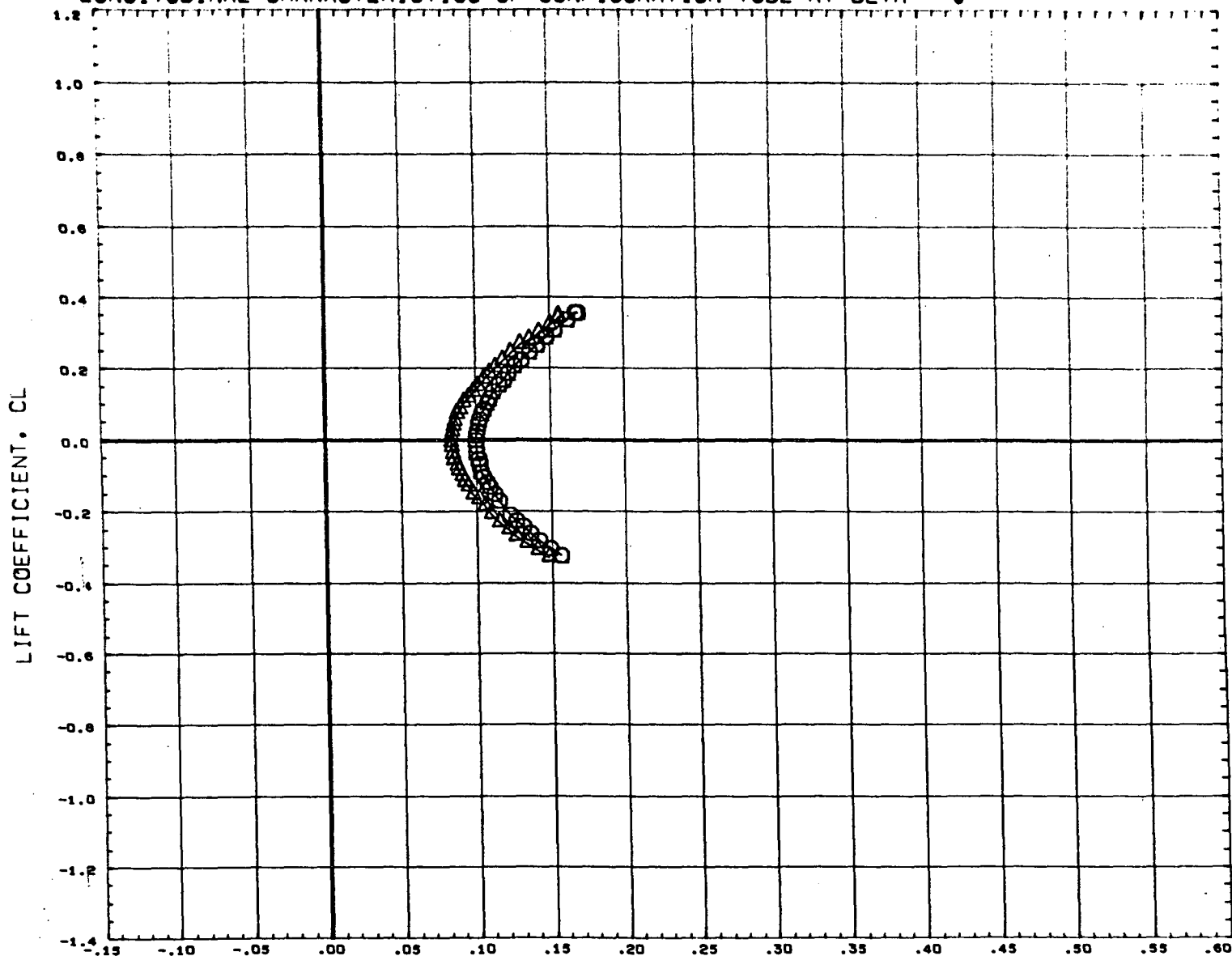
REFERENCE INFORMATION		
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BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP 72 PAGE 527

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0



FOREBODY DRAG COEFFICIENT, CDF

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

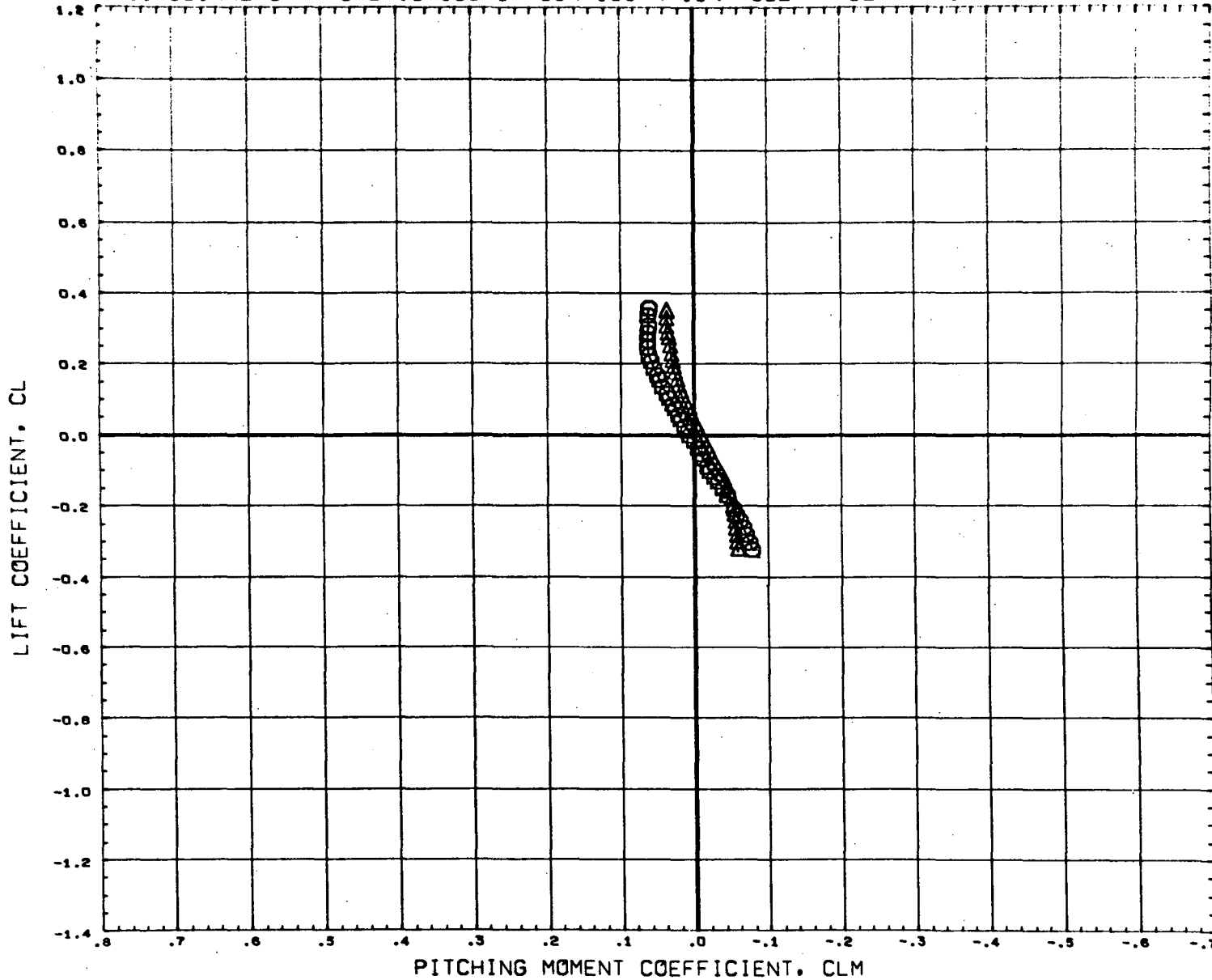
REFERENCE INFORMATION		
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BREF	882.0004	IN.
XMRP	537.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP 72 PAGE 528

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B2 AT BETA = 0



SYMBOL	MACH	BETA	PARAMETRIC VALUES	
O Δ	1.507	0.000	AILRON	0.000
	2.203	0.000	RUDDER	0.000

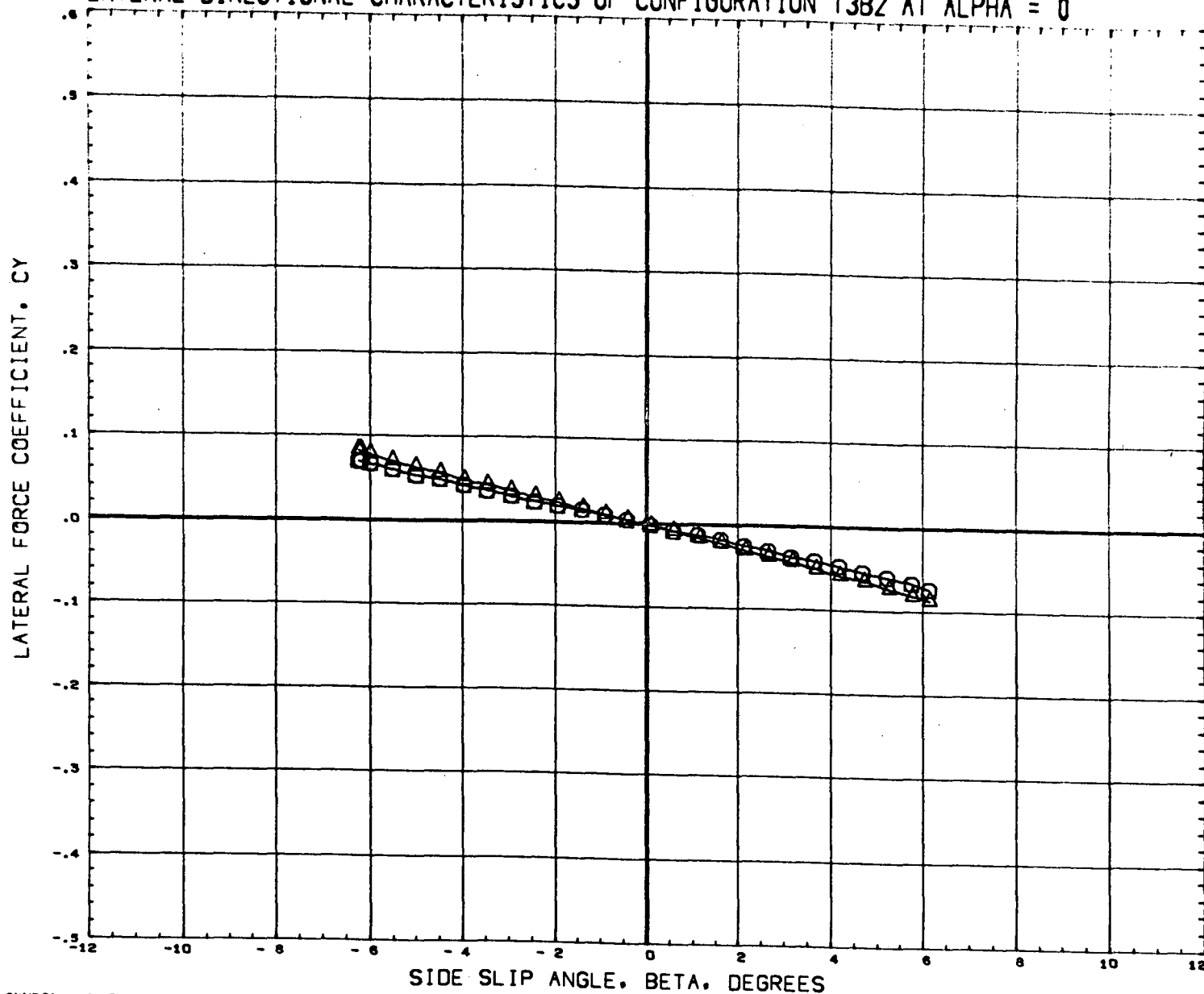
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LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE \*GTV

MDAC S-222 COMPOSITE(T-CG) T3B2

(CD7544) 12 SEP 72 PAGE 529

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T3B2 AT ALPHA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
	1.507	ALPHA	0.000	AILRON	0.000
	2.203	ELEVTR	0.000	RUDDER	0.000

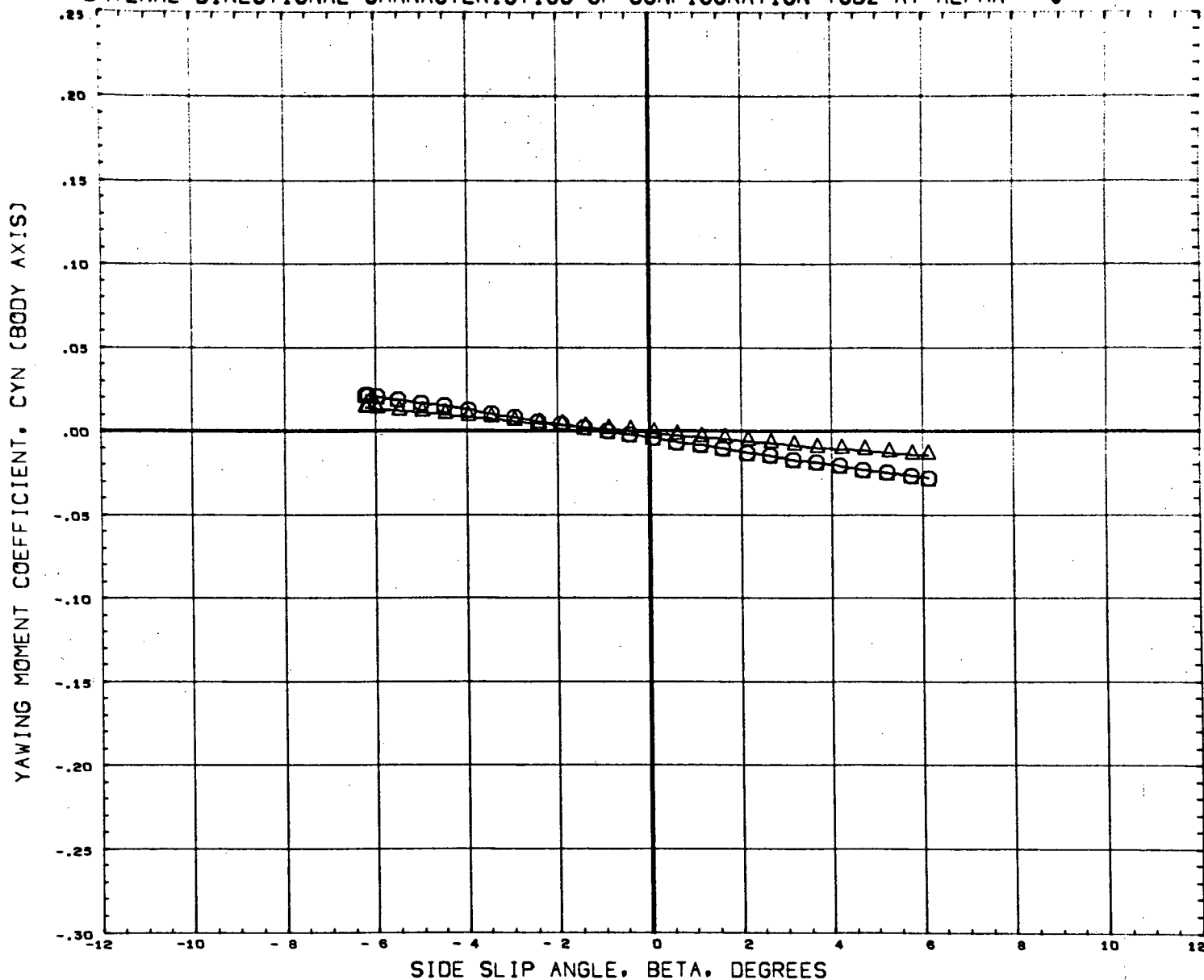
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YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T3B2

(RD7545) 17 MAR 72 PAGE 530

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T3B2 AT ALPHA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

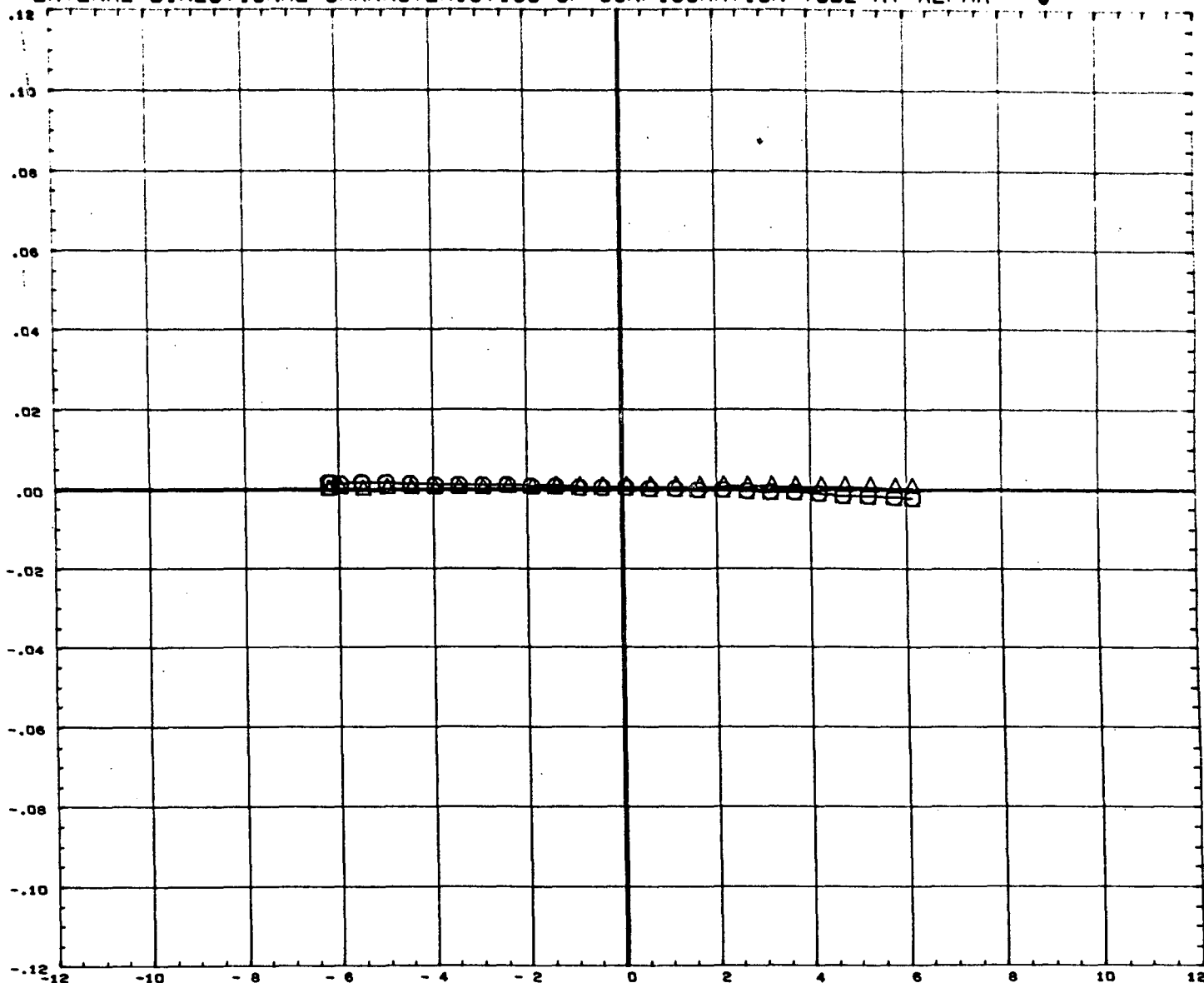
REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T3B2

(RD7545) 17 MAR 72 PAGE 531

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T3B2 AT ALPHA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

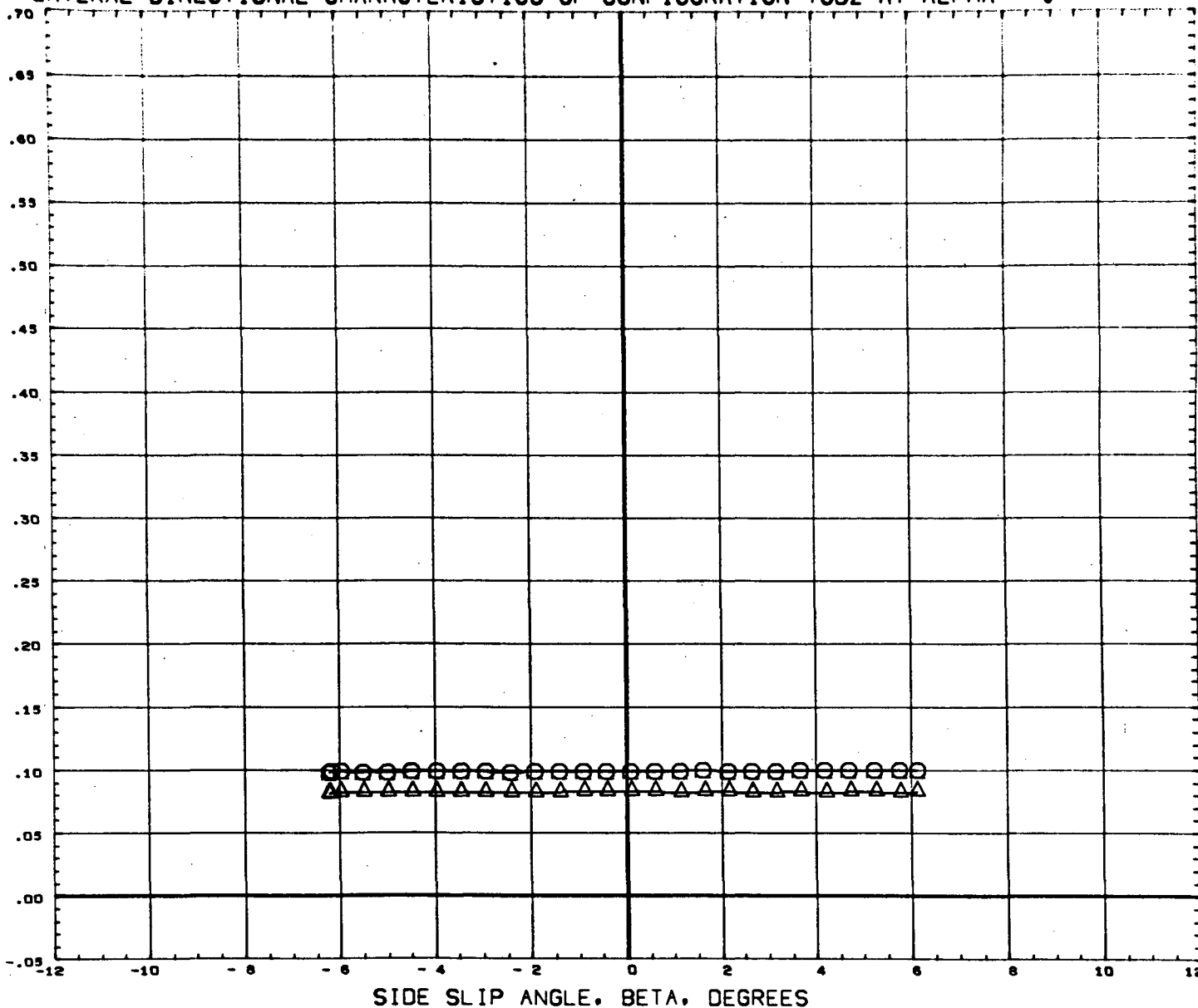
REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T3B2

(RD7545) 17 MAR 72 PAGE 532

# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T3B2 AT ALPHA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	0.000
Δ	2.203	ELEVTR	0.000	RUDDER	0.000

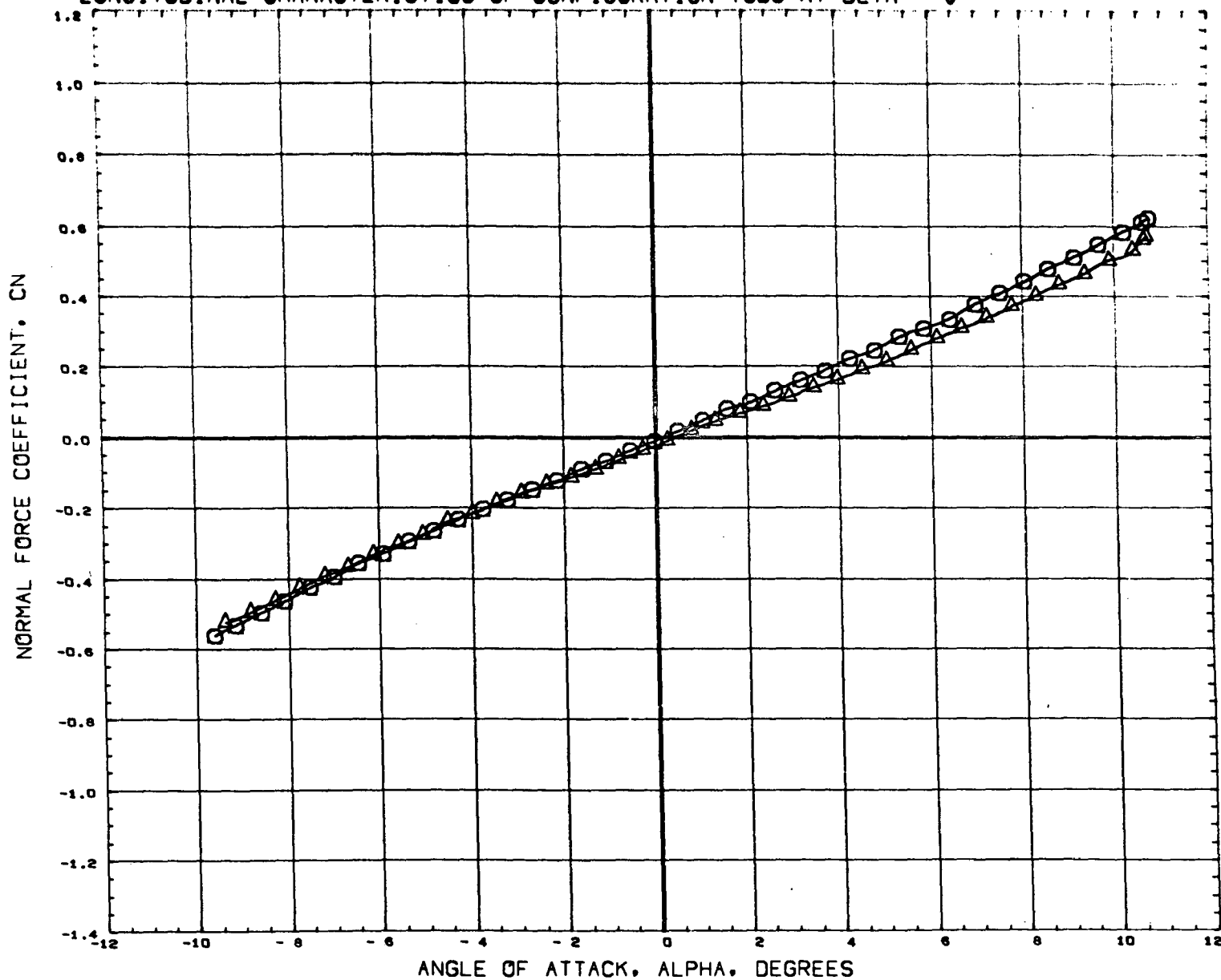
REFERENCE INFORMATION		
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LREF	609.5004	IN.
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XMRP	537.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T3B2

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.3004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

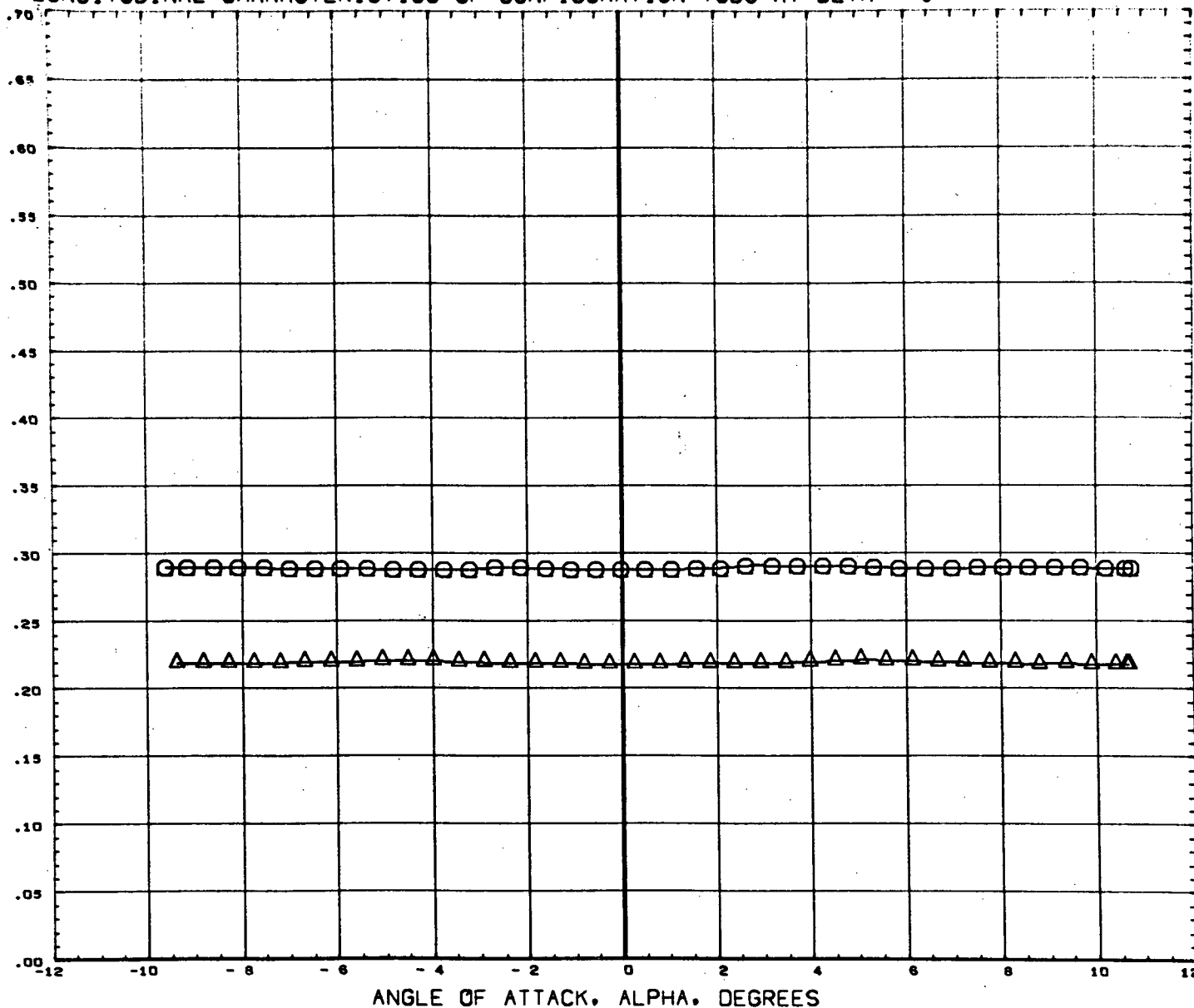
MDAC S-222 COMPOSITE(T-CG) T3B5

(CD7546) 12 SEP 72 PAGE 534



# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0

AXIAL FORCE COEFFICIENT, CA



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

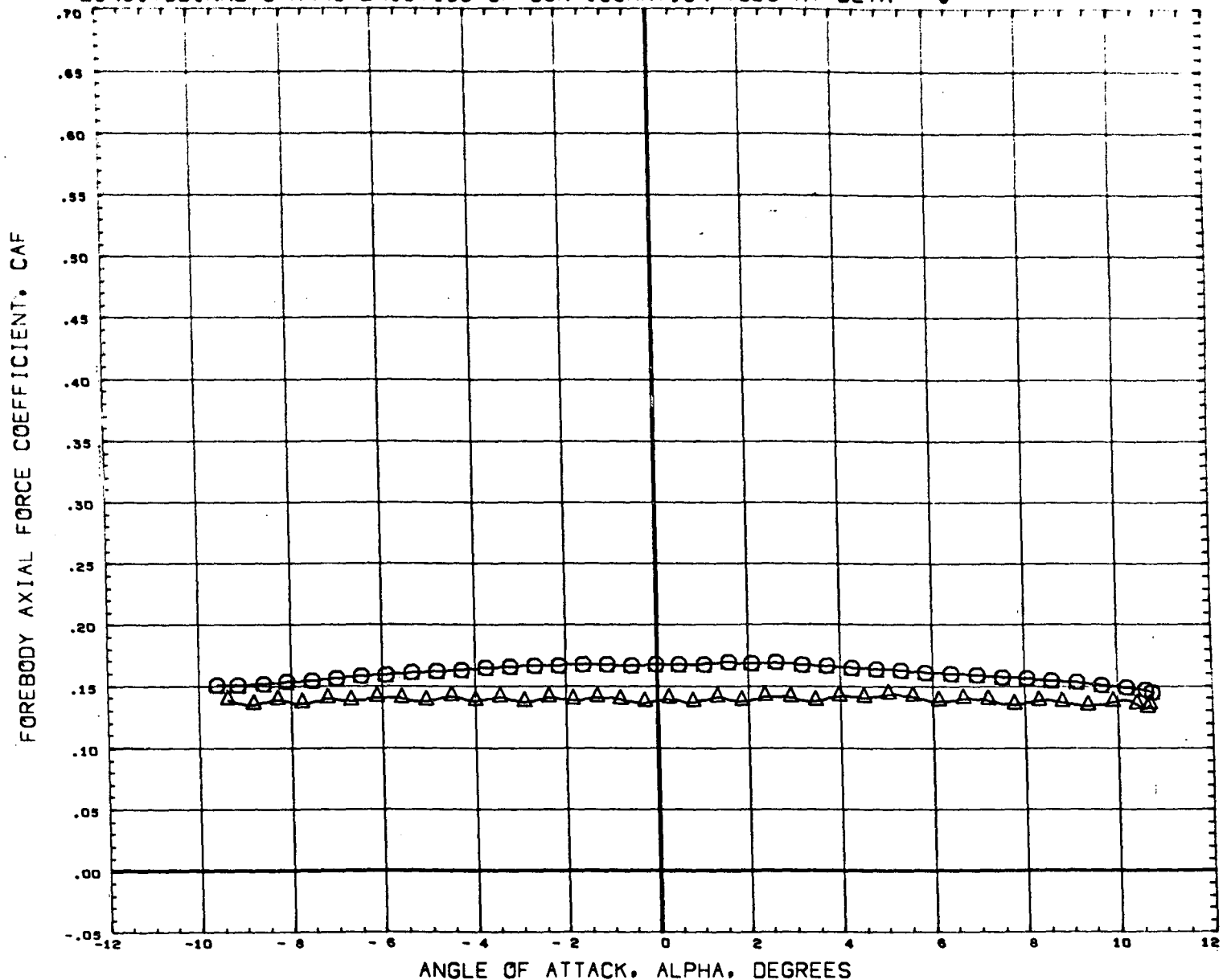
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LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

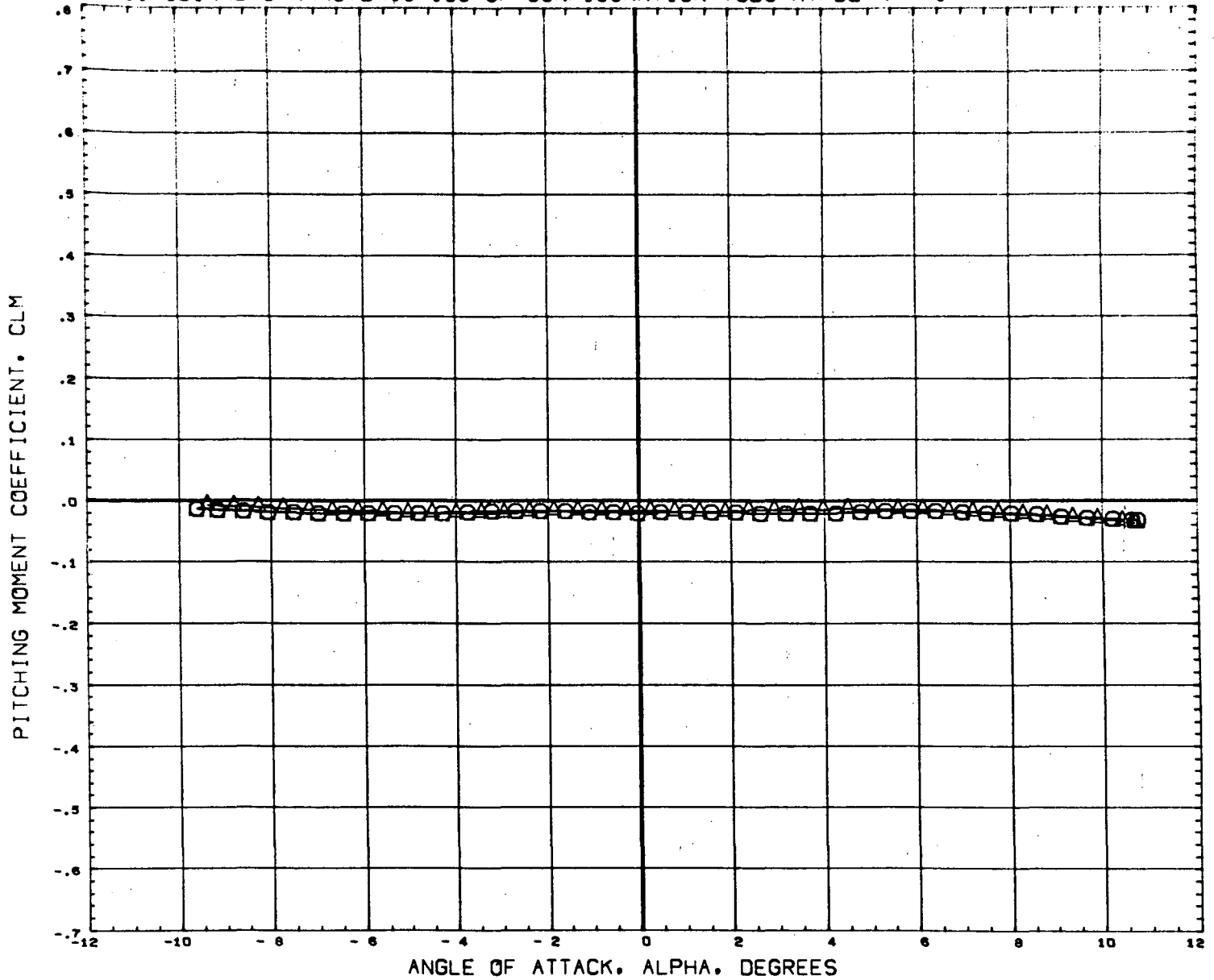
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XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

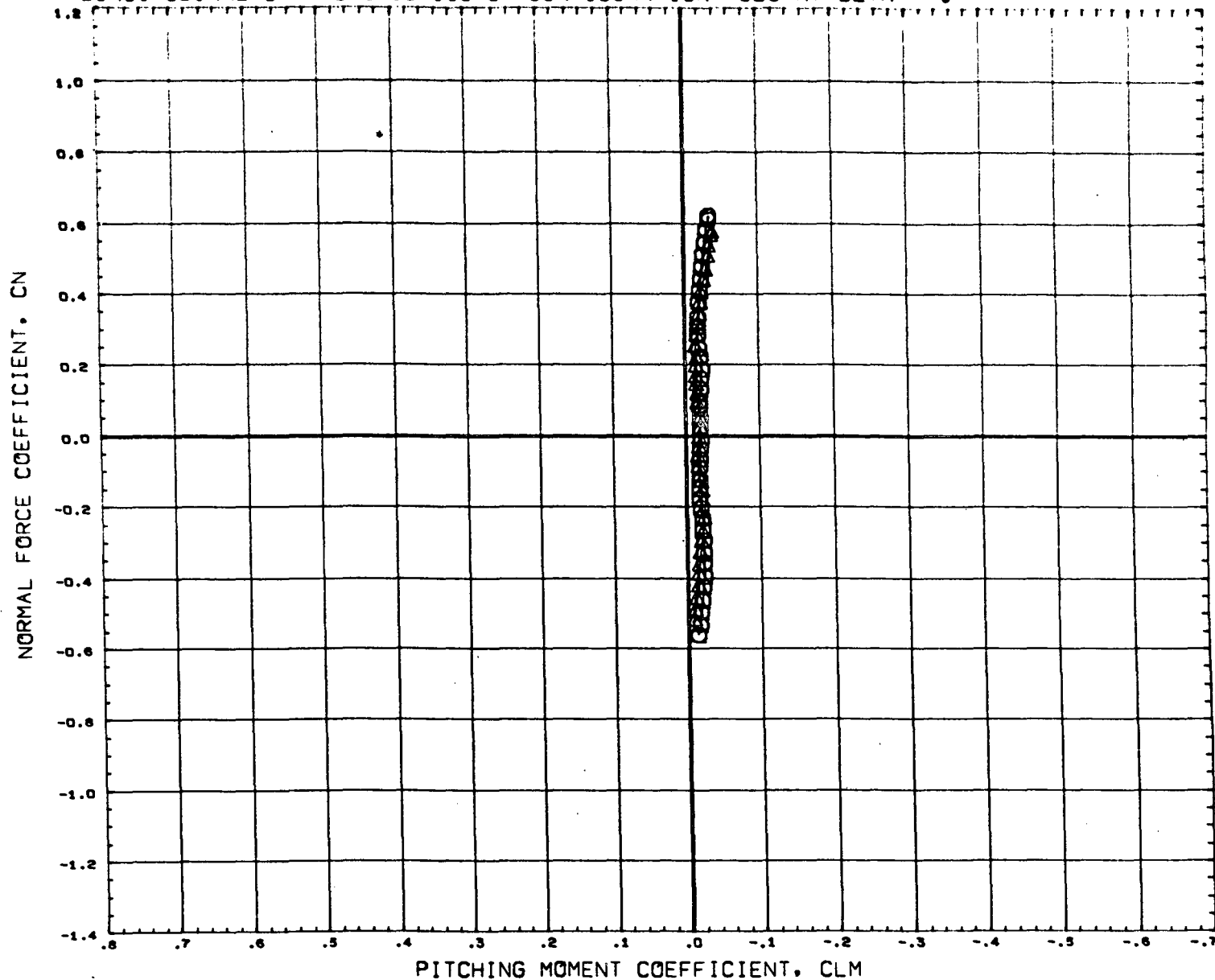
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YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T3B5

(CD7546) 12 SEP 72 PAGE 537

# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

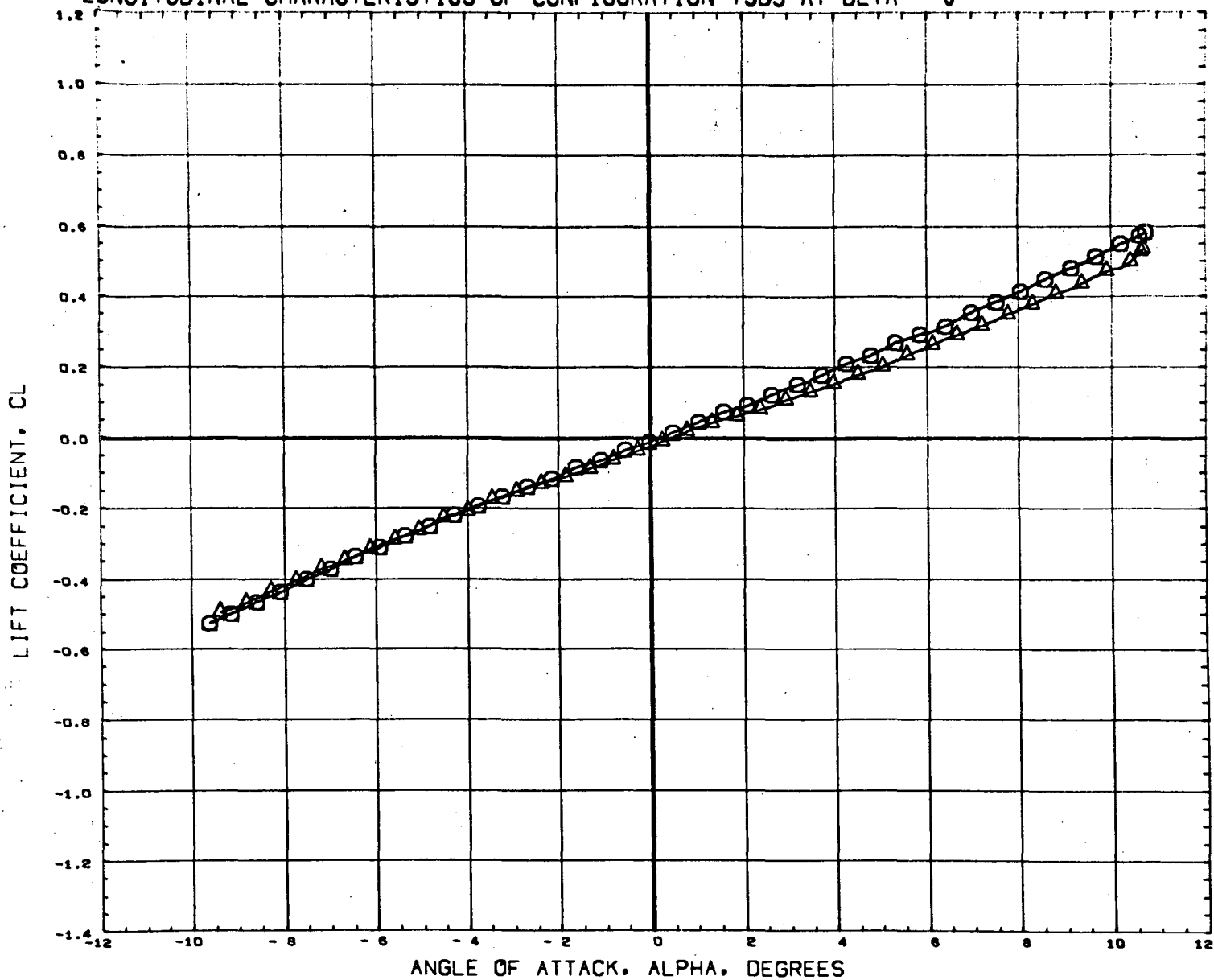
REFERENCE INFORMATION		
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BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRF	557.0004	IN.
YMRF	0.0000	IN.
ZMRF	200.0004	IN.
SCALE	0.0060	

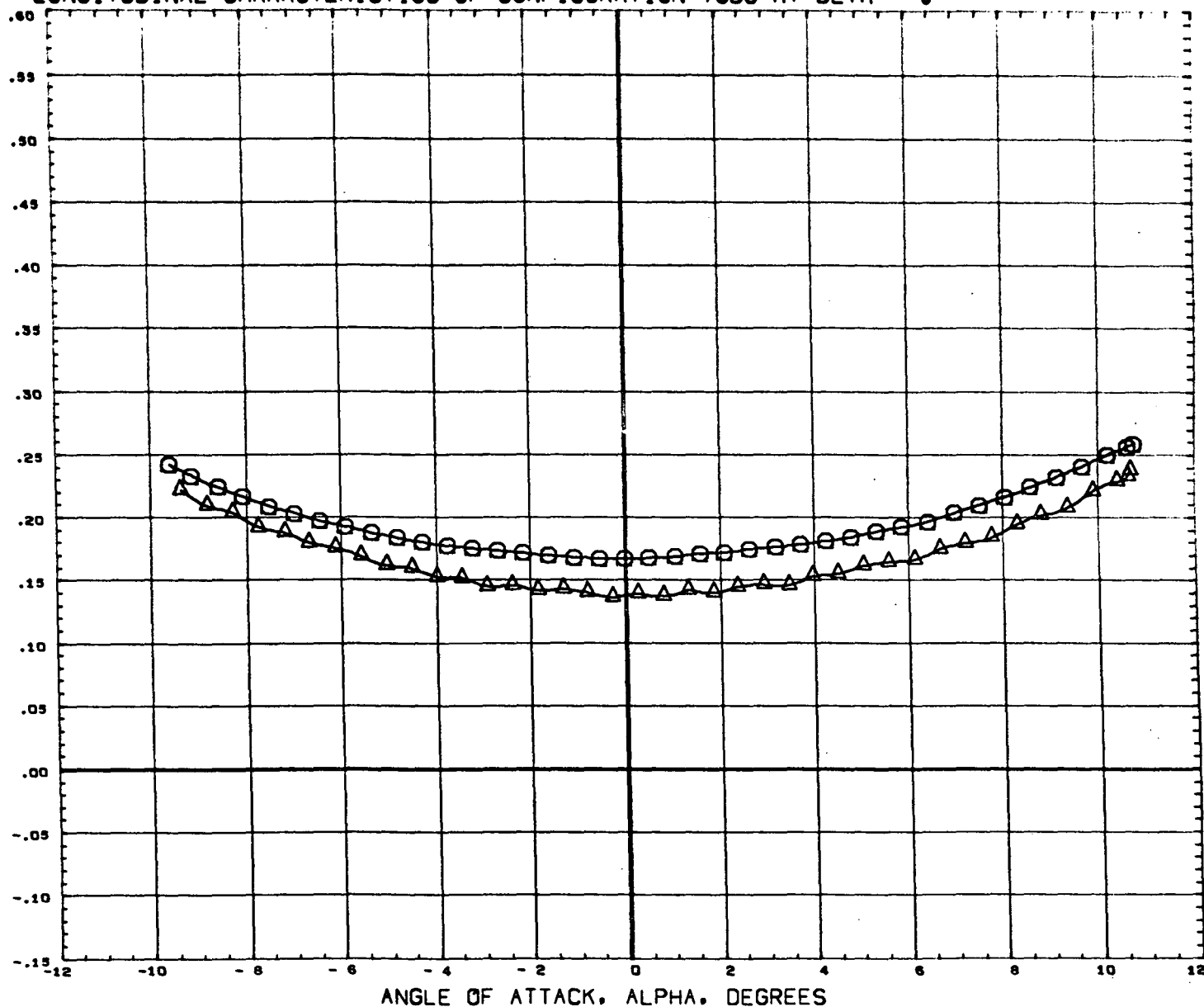
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0

FOREBODY DRAG COEFFICIENT, CDF



SYMBOL	MACH	PARAMETRIC VALUES			
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△	2.203	ELEVTR	0.000	RUDDER	0.000

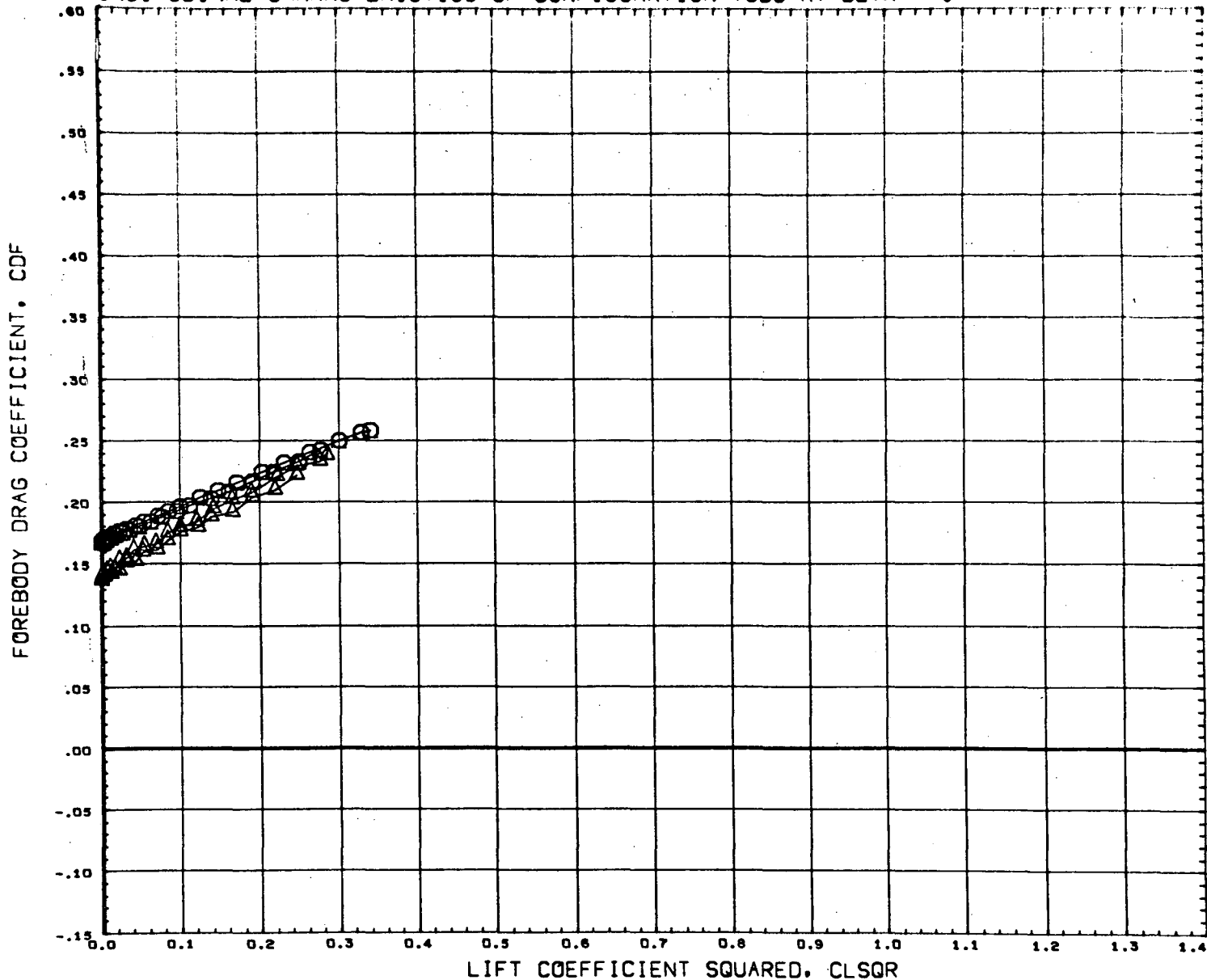
REFERENCE INFORMATION		
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XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

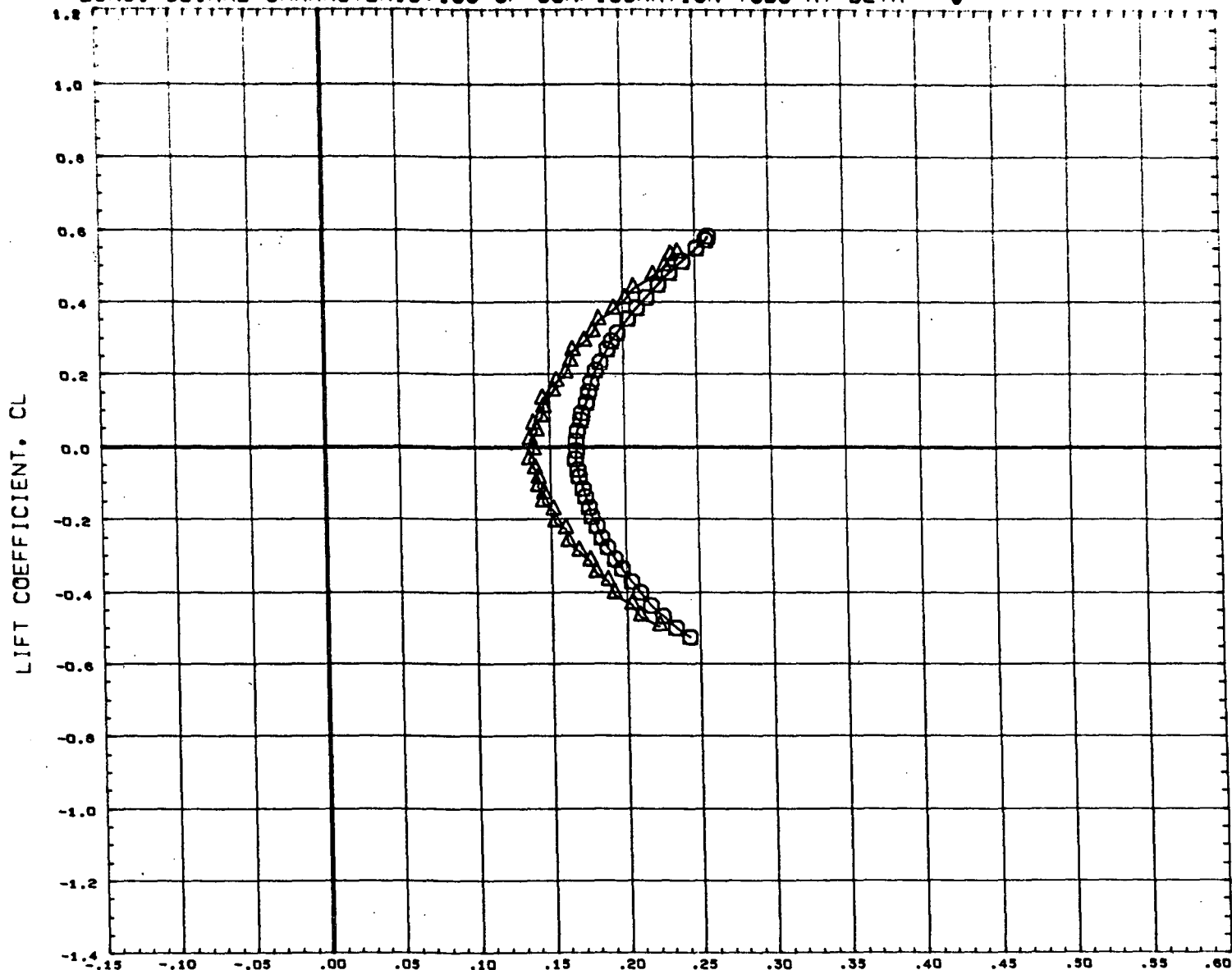
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BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0



SYMBOL	MACH	BETA	ELEVTR	PARAMETRIC VALUES	AILRON	RUDDER
○	1.507	0.000	0.000	AILRON	0.000	0.000
△	2.203	0.000	0.000	RUDDER	0.000	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

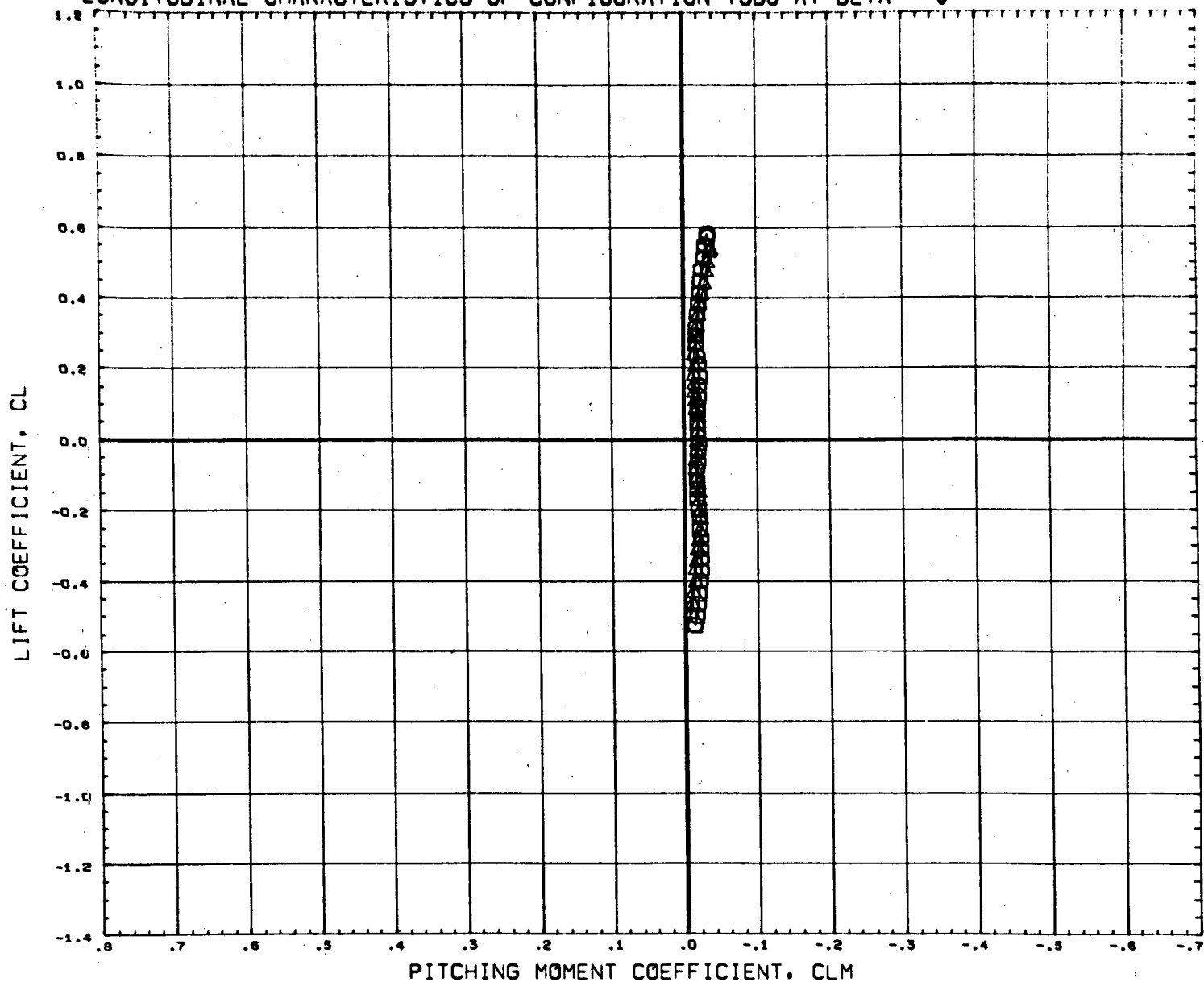
DATA HIST. CODE TV

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LONGITUDINAL CHARACTERISTICS OF CONFIGURATION T3B5 AT BETA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	BETA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

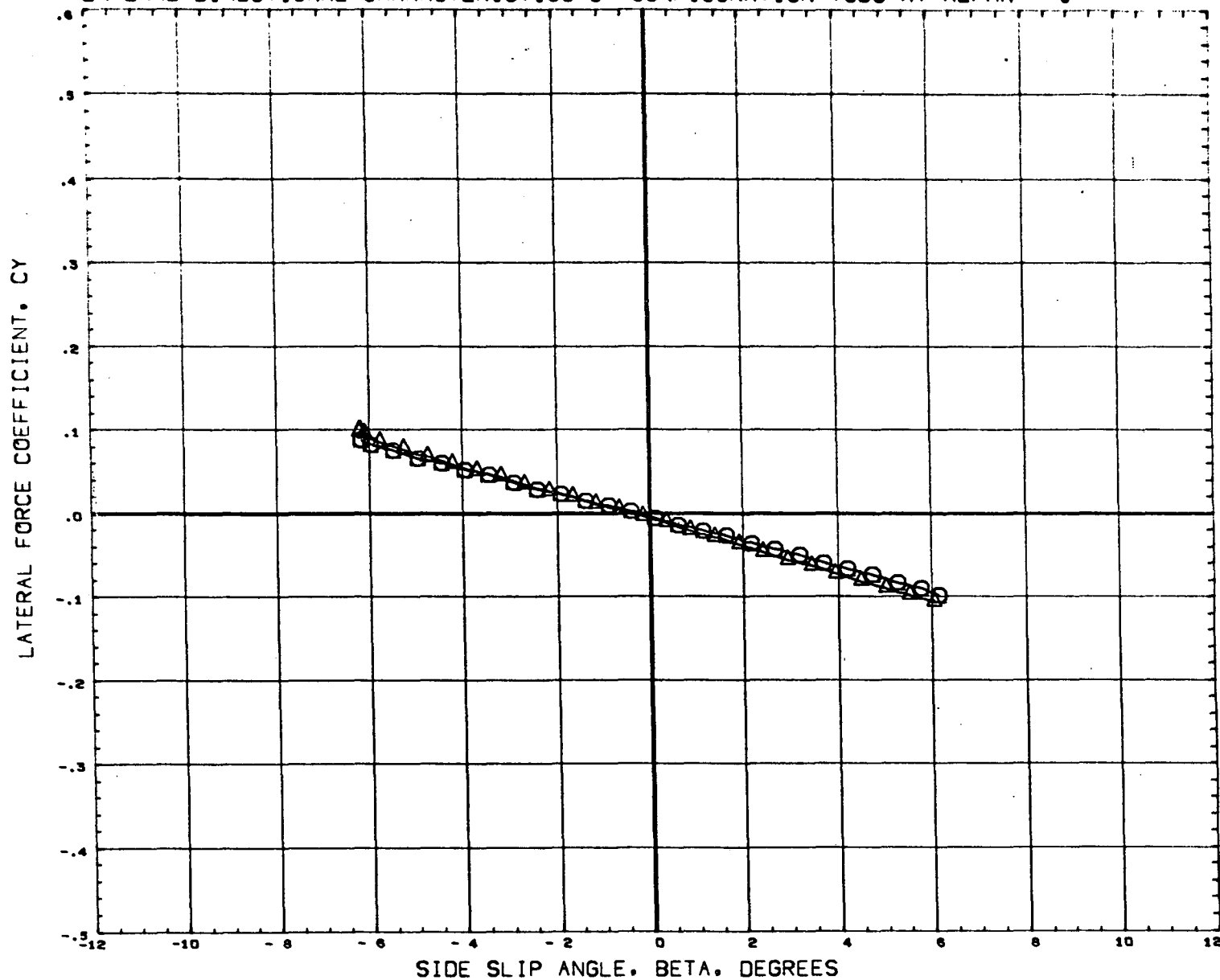
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BREF	882.0004	IN.
XM RP	557.0004	IN.
YM RP	0.0000	IN.
ZM RP	200.0004	IN.
SCALE	0.0060	

DATA HIST. CODE TV

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# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T3B5 AT ALPHA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	0.000
△	2.203	ELEVTR	0.000	RUDDER	0.000

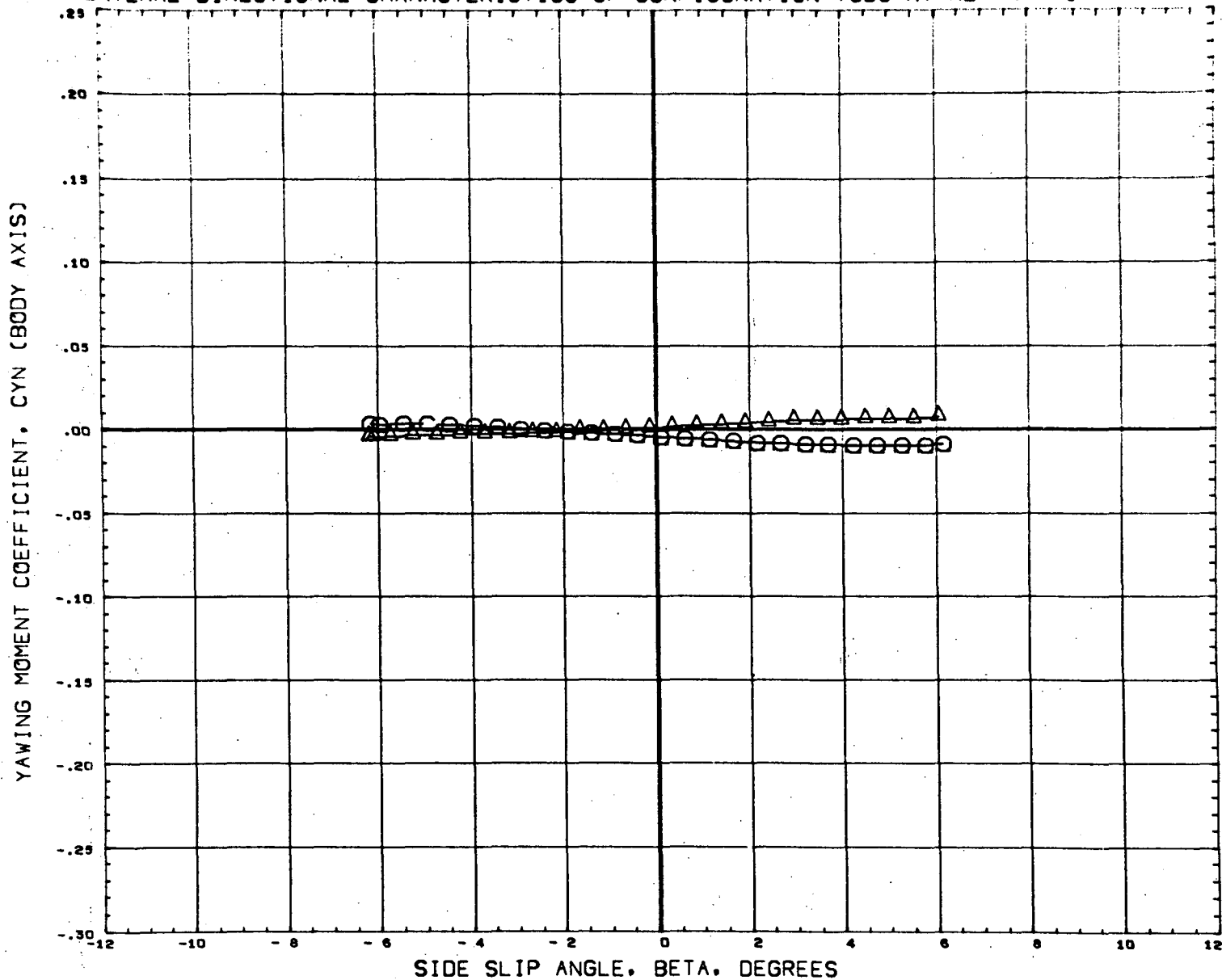
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XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T3B5 AT ALPHA = 0



SYMBOL	MACH	PARAMETRIC VALUES			
○	1.507	ALPHA	0.000	AILRON	0.000
Δ	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

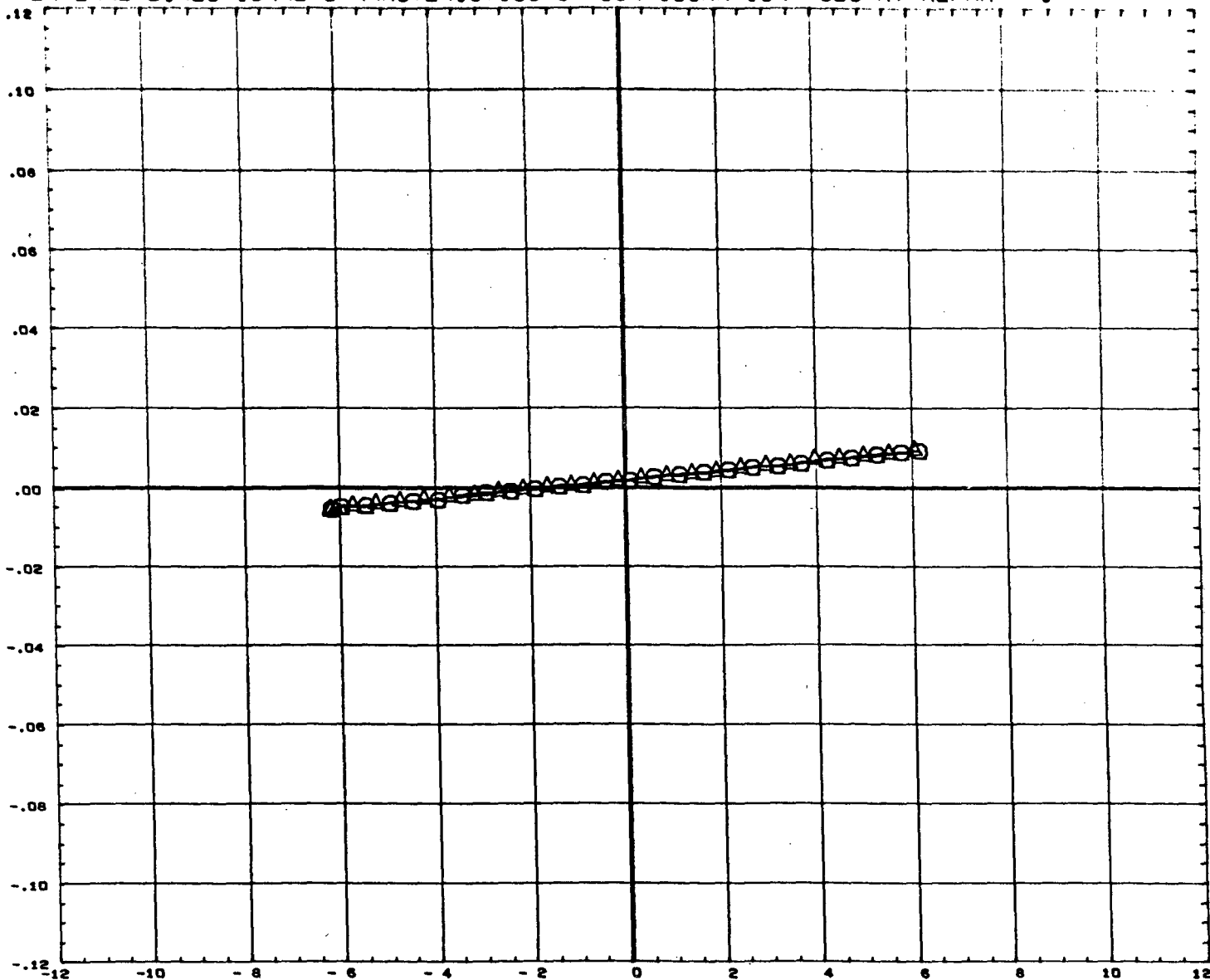
REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T3B5 AT ALPHA = 0

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



SIDE SLIP ANGLE, BETA, DEGREES

SYMBOL	MACH	ALPHA	PARAMETRIC VALUES		
○	1.507	0.000	AILRON	0.000	
△	2.203	ELEVTR	0.000	RUDDER	0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	882.0004	IN.
XMRP	557.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

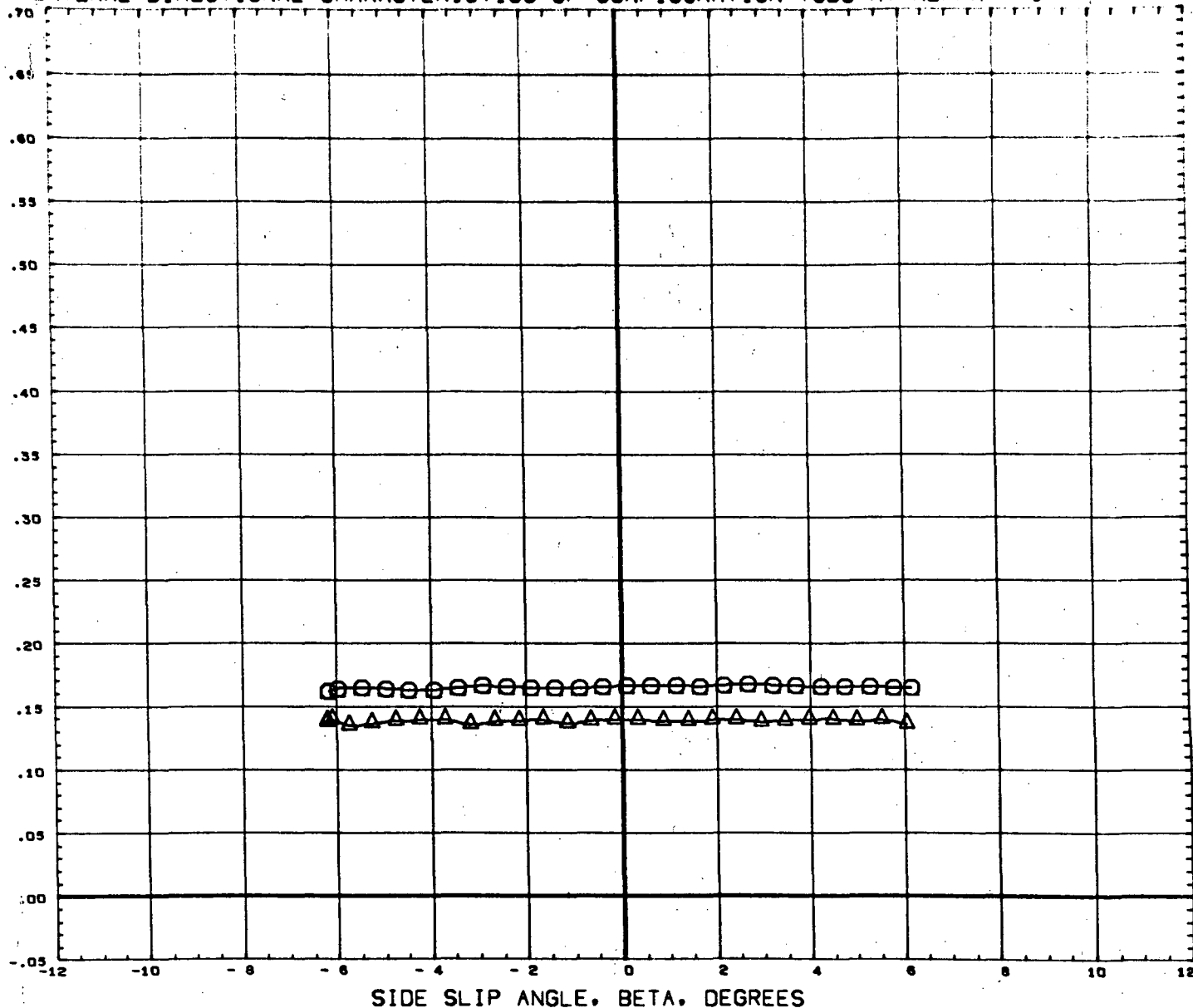
REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T3B5

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# LATERAL-DIRECTIONAL CHARACTERISTICS OF CONFIGURATION T3B5 AT ALPHA = 0

FOREBODY AXIAL FORCE COEFFICIENT, CAF



SYMBOL	MACH	PARAMETRIC VALUES
○	1.507	ALPHA 0.000 ATLRON 0.000
△	2.203	ELEVTR 0.000 RUDDER 0.000

REFERENCE INFORMATION		
SREF	3155.3040	SQ.FT.
LREF	609.5004	IN.
BREF	862.0004	IN.
XMRP	537.0004	IN.
YMRP	0.0000	IN.
ZMRP	200.0004	IN.
SCALE	0.0060	

REFERENCE FILE

MDAC S-222 COMPOSITE(T-CG) T3B5

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